IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AUTOMOTIVE TECHNOLOGIES INTERNATIONAL, INC., Plaintiff, v. AMERICAN HONDA MOTOR CO., INC., ELESYS NORTH AMERICA, INC. and GENERAL MOTORS CORPORATION, Defendants.	Civil Action No. 06-187-GMS

FINAL JOINT CLAIM CHART

In accordance with the terms of the Court's scheduling order, attached hereto as Exhibit A is the parties' Final Joint Claim Chart.

Respectfully submitted,

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Dated: February 9, 2007

CERTIFICATE OF SERVICE

I hereby certify that on February 9, 2007, the foregoing Final Joint Claim Chart was electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to the following:

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Additionally, I hereby certify that on the same date, the foregoing document was served on the below counsel as indicated:

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AUTOMOTIVE TECHNOLOGIES INTERNATIONAL, INC. v. AMERICAN HONDA MOTOR CO. INC., ET AL.
Civil Action No. 06-00187 (GMS)

Final Joint Claim Chart[1][2]

1. U.S. PATENT NO. 5,901,978

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. In a motor vehicle having an interior passenger compartment including a seat on which a child seat may be placed, [1]**a detector system for detecting the presence of the child seat on the seat,** comprising:	[1]**a detector system for detecting the presence of the child seat on the seat,**	See note.[3]	[1] An assemblage of inter-related elements that determine whether a child seat, as distinguished from some other occupying items, is located on a seat within the passenger compartment of a motor vehicle. (Abstract; col. 6, lines 48-49)

[1] ATI reserves the right to supplement, modify, and/or amend its proposed terms, constructions, and support based on continuing evaluation and consideration of the terms, constructions, and support suggested by the parties, anticipated continuing dialogue among the parties regarding claim construction, and in view of having not been afforded by defendants sufficient time to review defendants' portions of the instant charts prior to the deadline for filing of the charts with the Court. ATI also objects to the various format modifications defendants made to ATI's proposed form of the instant chart, which was intended to permit ease of review and use by the Court and parties concerned. These modifications include, for example, the superfluous listing of claim numbers in the column 1 claim headers, unnecessary and confusing highlighting of claim terms in the column 1 claim listings coupled with duplicative highlighting of defendants' disputed terms in column 2, and reduction of the width of ATI's column 3 proposed constructions and support as compared to defendants' column 4 in at least some of the instant charts.

[2] Defendants reserve the right to supplement, modify, and/or amend its proposed terms, constructions, and support based on continuing evaluation and consideration of the terms, constructions, and support suggested by the parties, and anticipated continuing dialogue among the parties regarding claim construction.

[3] ATI's position is that claim preambles of the patents-in-suit are not limitations and thus not subject to construction. To the extent construed, claim preambles should be given their plain, ordinary, customary meaning (*e.g. "a detector system for detecting the presence of the child seat on the seat"* means a detector system for detecting the presence of the child seat on the seat.)

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
[2]**receiving means arranged in the vehicle for obtaining information about the contents of the seat and generating a signal based on any contents of the seat, said receiving means being structured and arranged to generate a different signal for different contents of the seat** when such contents are present on the seat, and	ATI: ***receiving means arranged... for obtaining information about contents of the seat and generating a signal*** HOND ET AL.: [2] **receiving means arranged in the vehicle for obtaining information about the contents of the seat and generating a signal based on any contents of the seat, said receiving means being structured and arranged to generate a different signal for different contents of the seat**	Structure arranged to obtain information about contents of the seat and generate a signal. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is obtaining information about the contents of a vehicle seat, and generating a signal based on any contents of the seat. Structure to perform the function includes that described in the patent specification and equivalents, such as a wave transmitting means, wave receiving means, and processor. Col. 7, lines 48-55; col. 7, lines 60-67.	[2] Receiving means is a means plus function limitation that must be construed under 35 U.S.C. § 112, ¶ 6. The receiving means performs three functions. Function 1: obtaining information about the contents of a vehicle seat. Function 2: generating a signal based on any contents of the vehicle seat. Function 3: generating a different signal for different contents of the vehicle seat. Structure: The receiving means includes a wave transmitting means, a wave receiving means and a processor. (col. 3, line 60 – col. 4, line 67; col. 7, lines 60-67) (Function 1) The wave transmitting means transmits ultrasonic waves towards the vehicle seat. The wave receiving means is arranged relative to the wave transmitting means and receives waves reflected from the vehicle seat. The processor is coupled to the wave receiving means. The wave transmitting means and wave receiving means also include transmitters and receivers that transmit and receive radar signals, infrared waves, and laser signals. The wave transmitting means and wave transmitting means also includes resonators and reflectors. (Fig. 1A, col. 3, line 59 – col. 5, line 6; col. 14, lines 42-45;

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			col. 19, line 55 – col. 20, line 4); (Prosecution history of '978 patent, Paper # 5, Amendment dated October 13, 1998, p. 8) (Function 2) The structure disclosed for generating a signal based upon the contents of the seat is a processor means coupled to a receiver means. The algorithm also includes an algorithm that analyzes a signal that is reflected from a monitored space, such as a passenger seat, in order to create a signal characteristic of the contents of the seat. The algorithm includes trained algorithms for determining the location of life forms in a vehicle. (col. 8, lines 2-16, col. 12, lines 26-60); (Prosecution history of '978 patent, Paper # 5, Amendment dated October 13, 1998, p. 8) (Function 3) The processor generates a different signal for different contents of the vehicle seat based on the received waves reflected from the vehicle seat. However, there is no structure disclosed in the specification concerning the algorithm by which the processor generates a different signal for different contents of the seat based on the received waves reflected from the vehicle seat. Accordingly, the "receiving means" limitation is fatally indefinite.

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			Alternatively, if this limitation is to be provided a construction, the receiving means requires, at the very least, a processor employing a trained neural network. (col. 12, lines 20-22)
[3]**analyzing means coupled to said receiving means for analyzing the signal in order to determine whether the contents of the seat include a child seat**.	ATI: ***analyzing means coupled to said receiving means for analyzing*** HONDA ET AL.: [3]**analyzing means coupled to said receiving means for analyzing the signal in order to determine whether the contents of the seat include a child seat**.	Structure coupled to said receiving means to analyze. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is analyzing the signal to determine whether the contents of the vehicle seat include a child seat. Structure to perform the function includes that described in the patent specification and equivalents, such as categorization means coupled to a processor for categorizing signals. The categorization means comprises a pattern recognition means, such as a trained neural network, for recognizing and identifying the contents of the seat by processing signals based on reflected waves from the contents of the seat into a categorization of the signals characteristic of the contents of the seat. The categorization means also includes a pattern recognition system trained by a neural network. Col. 7, lines 55-60; col. 8, lines 5-16.	[3] The analyzing means is coupled to the processor of the receiving means. The term coupled means directly linked with no intermediate processors. The analyzing means is a means plus function limitation that must be construed under 35 U.S.C. § 112, ¶ 6. Function: analyzing the signal generated by the receiving means to determine whether the contents of the vehicle seat include a child seat. Structure: there is no structure disclosed in the specification for the analyzing means. Instead, the specification discloses that the analyzing means may comprises a categorization means (which is coupled to the processor of the "receiving means"), which, in turn, comprises pattern recognition means. There is no disclosure in the specification concerning the structure of the categorization means. There is similarly no disclosure in the specification concerning the structure of

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			the pattern recognition means. The specification merely states that the pattern recognition means is a trained pattern recognition algorithm trained by a neural network, but no information concerning the algorithm is disclosed. (col. 12, lines 25-50) Accordingly, the "analyzing means" limitation is fatally indefinite. . Alternatively, if this limitation is to be provided a construction, the analyzing means requires, at the very least, a trained pattern recognition algorithm trained by a neural network for recognizing and identifying the contents of the vehicle seat by processing the signals based on the waves reflected from the contents of the vehicle seat into a categorization of signals characteristic of the contents of the vehicle seat and equivalents. col. 5, lines 1-6; col. 8, lines 5-13); (Prosecution history of '978 patent, Paper # 5, Amendment dated October 13, 1998, p. 8)
2. The system of claim 1, wherein said analyzing means are [4]**structured**	[4]**structured and arranged to determine whether**	See note.[4]	[4] The term "rear-facing position" is vague and ambiguous. The term "rear-facing" refers to the orientation of the

[4] ATI's position is that, other than those terms listed by ATI, no other terms of the patents-in-suit require construction. For those terms listed by defendants that are not listed by ATI, ATI specifically states that the terms need no construction, are not indefinite or otherwise deficient, and if construed should be given their plain, ordinary, customary meaning (*e.g. "structured and arranged to determine whether the child seat is in a rear-facing position"* means structured and arranged to determine whether the child seat is in a rear-facing position.)

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
and arranged to determine whether the child seat is in a rear-facing position.	**the child seat is in a rear-facing position**.		child seat, not its position. (col. 7, lines 59-60) Therefore, this limitation is indefinite.
10. The system of claim 1, wherein said analyzing means comprise [5]**categorization means for categorizing the signal to obtain an identification of the contents of the seat**.	ATI: ***categorization means for categorizing*** HONDA ET AL.: [5]**categorization means for categorizing the signal to obtain an identification of the contents of the seat**.	Structure to categorize. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is categorizing the signal to obtain an identification of the contents of the seat. Structure to perform the function includes that described in the patent specification and equivalents, such as pattern recognition means, such as a trained neural network, for recognizing and identifying the contents of the seat by processing signals based on reflected waves from the contents of the seat into a categorization of the signals characteristic of the contents of the seat. The categorization means also includes a pattern recognition system trained by a neural network. Col. 8, lines 5-16; col. 8, lines 26-46.	[5] Categorization means is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶ 6. Function: categorizing the signal based upon the characteristics of the waves reflected by the contents of the vehicle seat to obtain an identification of the contents of the seat. Structure: there is no structure disclosed in the specification for the categorization means other than it comprises a pattern recognition means. There is similarly no disclosure in the specification concerning the structure of the pattern recognition means. The specification merely states that the pattern recognition means is a pattern recognition system trained by a neural network. (col. 12, lines 25-50) Therefore, this limitation is indefinite. Alternatively, if this limitation is to be provided a construction, the analyzing means requires, at the very least, a processor employing a trained pattern

CLAIMS 1,2, AND 10-11 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			recognition algorithm trained by a neural network for recognizing and identifying the contents of the vehicle seat by processing the signals based on the waves reflected from the contents of the vehicle seat into a categorization of signals characteristic of the contents of the vehicle seat and equivalents. (col. 5, lines 1-6; col. 8, lines 5-13); (Prosecution history of '978 patent, Paper # 5, Amendment dated October 13, 1998, p. 8)
11. The system of claim 1, further comprising [6]**output means coupled to said analyzing means for affecting at least one other system within said vehicle based on the determination of whether a child seat is present on the seat.**	ATI: ***output means . . . for affecting at least one other system*** HONDA ET AL.: [6]**output means coupled to said analyzing means for affecting at least one other system within said vehicle based on the determination of whether a child seat is present on the seat.**	Structure to affect at least one other system. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is affecting at least one other system within the vehicle, based on the determination of whether a child seat is present on the vehicle seat. Structure to perform the function includes that described in the patent specification and equivalents, such as an electronic system associated with the other system. Col. 8, lines 26-58; col. 9, lines 24-31; col. 12 line 61 – col. 14 line 65; col. 16, lines 36-46; Figs. 1, 1A, 2, 7A, 7B, and 9.	[6] The output means is coupled to the analyzing means. The output means is a means plus function limitation and must be construed under 35 U.S.C. § 112, ¶ 6. Function: affecting at least one other system within the vehicle, e.g., a system other than the detector system, based on the determination of whether a child seat is present on the vehicle seat. Structure: there is no structure disclosed in the specification for the output means. Therefore, this limitation is indefinite.

EXHIBIT 10

CLAIMS 12-14, 21 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
12. In a motor vehicle having an interior passenger compartment including a seat on which a child seat may be placed , [7]**a method for detecting the presence of a child seat on the seat,** comprising:	[7]**a method for detecting the presence of a child seat on the seat,**		[7] A method for detecting the presence of a child seat, as distinguished from some other occupying item, on a seat that is located in an interior passenger compartment of a motor vehicle.
[8]**obtaining information about contents of the seat**;	[8]**obtaining information about contents of the seat**;	See note.[5]	[8] This step is a step plus function claims and must be construed under 35 U.S.C. § 112, ¶ 6. The acts disclosed in the specification for this "obtaining" step consist of transmitting ultrasonic, laser signals, radar, or infrared waves towards the contents of the vehicle seat and receiving ultrasonic, laser signals, radar, or infrared reflected by the contents of the vehicle seat. (col. 3, line 59 – col. 5, line 6; col. 11, lines 40-44; col. 14, lines 42-45) The acts disclosed in the specification for this "obtaining" step also consist of transmitting an ultrasonic energy signal at an excitation frequency to excite one or more resonators and receiving the return energy signals from the excited resonators. (col. 19, line 55 – col. 20, line 23
[9]**generating a signal**	[9]**generating a**		[9] Generating a signal based on the

[5] In addition to not agreeing that terms other than those listed by ATI require construction, ATI does not agree that terms in the patents-in-suit suggested as "step-plus-function" terms are such terms subject to 35 U.S.C. § 112(6).

CLAIMS 12-14, 21 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
based on the information about the contents of the seat, a different signal being generated for different contents of the seat when such contents are present on the seat, and	**signal based on the information about the contents of the seat, a different signal being generated for different contents of the seat when such contents are present on the seat**,		information about the contents of the seat means converting the obtained information into a digital signal. A different signal is generated for different contents of the seat based on received waves reflected from the seat. (col. 7, lines 65-67; col. 12, lines 50-54)
[10]**analyzing the signal in order to determine whether the contents of the seat include a child seat**.	[10]**analyzing the signal in order to determine whether the contents of the seat include a child seat**.		[10] Using a trained pattern recognition algorithm generated by a neural network to identify contents of the seat as a child seat based on the obtained information. (col. 8, lines 5-13; col. 12, lines 26-60); (Prosecution history of '978 patent, Paper # 5, Amendment dated October 13, 1998, p. 8)
13. The method of claim 12, wherein the step of analyzing the signal comprises the step of [11]**analyzing the signal to determine whether the contents of the seat include a child seat in a rear-facing position**.	[11]**analyzing the signal to determine whether the contents of the seat include a child seat in a rear-facing position**.		[11] The term "rear-facing position" is vague and ambiguous. The term "rear-facing" refers to the orientation of the child seat, not its position. (col. 7, lines 59-60) Therefore, this limitation is indefinite.
14. The method of claim 12, wherein the step of obtaining information about the contents of the seat comprises [12]**the steps of**	[12]**the steps of transmitting waves toward the seat and receiving waves reflected from the**		[12] Transmitting ultrasonic, laser signals, radar, or infrared waves toward the seat and receiving ultrasonic, laser signals, radar, or infrared waves reflected from the seat. (col. 3, line 60 – col. 4, line 67; col.

CLAIMS 12-14, 21 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
transmitting waves toward the seat and receiving waves reflected from the seat,	**seat**,		7, lines 60-67; col. 14, lines 42-45; col. 19, line 55 – col. 20, line 4) The term, "waves" means propagating signals that have a direction of propagation, velocity of propagation, and a wavelength which depend on the property of the materials in which the waves exists and the type of waves (e.g., acoustic, mechanical, electromagnetic). (col. 15, lines 4-5; col. 16, lines 43-47; col. 17, lines 36-41); (Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3)
the step of generating a signal based on the information about the contents of the seat comprising [13]**the step of processing the received, reflected waves in order to** [14]**generate a different signal for different received, reflected waves**.	[13]**the step of processing the received, reflected waves in order to** [14]**generate a different signal for different received, reflected waves**.		[13] Converting the received, reflected waves into a digital signal which can then be analyzed by a pattern recognition algorithm. (col. 12, lines 50-54); (Prosecution history of '978 patent, Paper # 5, Amendment dated October 13, 1998, p. 8) [14] A different signal is generated for different contents of the seat based on received waves reflected from the seat. (col. 7, lines 65-67)

CLAIMS 12-14, 21 OF THE '978 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
21. The method of claim 12, further comprising [15]**the step of affecting at least one other system within said vehicle** based on the determination of whether a child seat is present on the seat.	21. The method of claim 12, further comprising [15]**the step of affecting at least one other system within said vehicle** based on the determination of whether a child seat is present on the seat.		[15] The term "other system" is vague and indefinite. No "system" has been claimed, thus an "other system" has no meaning. Therefore this limitation is incapable of construction.

2. U.S. PATENT NO. 6,242,701

CLAIMS 1, 3 and 5-6 OF THE '701 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
A seat for a vehicle, comprising			
A [1] **seat cushion assembly** and [2] **seat back assembly** defining [3] **a contact surface** [4] **adapted to be in contact** with [5] **an occupying item** of the seat,	[1] **seat cushion assembly** [2] **seat back assembly** [3] **a contact surface** [4] **adapted to be in contact** [5] **an occupying item**		[1] The limitation, "seat cushion assembly" means a sitting portion of a seat. The '701 patent, Fig. 1, numerals 2 and p. 8; ATI's Amendment dated Nov. 21, 2000 for the '701 patent. [2] The limitation, "seat back assembly" means a back portion of a seat. The '701 patent, Fig. 1, numeral 3 and p. 8, ATI's Amendment dated Nov. 21, 2000 for the '701 patent. [3] The limitation, "a contact surface" means a surface that contacts an occupying item. The '701 patent, Figs. 1, 10, 13 and 15-16. [4] The phrase, "adapted to be in contact" is a limitation and requires the contact surface to actually contact an occupying item. The '701 patent, Col. 13, lines 28-29 and lines 45-49. [5] The limitation, "an occupying item" means an object which applies the force on the contact surface and which occupies a seated area, such as a human being, or a bag of groceries. The '701 patent, Col. 13, lines 45-49; U.S. Pat. No. 6,422,595, col. 6, lines 29-30.

[6] **a support structure** [7] **arranged underneath** said seat cushion assembly and [8] **adapted to support** said seat cushion assembly and said seat back assembly [9] **on a substrate** in the vehicle, said support structure being [10] **structured and arranged to transfer a force exerted by the occupying item on said support structure to the substrate**,	[6] **a support structure** [7] **arranged underneath** [8] **adapted to support** [9] **on a substrate** [10] **structured and arranged to transfer a force exerted by the occupying item on said support structure to the substrate**		[6] The limitation, "support structure" means structure that supports the seat cushion assembly and the seat back assembly on a substrate and that is capable of bearing force exerted by the occupying item on the seat cushion assembly and the seat back assembly and that is deformed or undergoes strain in response to the transfer of the force through it. Prosecution history of the '701 patent, p. 11, ATI's Amendment dated Aug. 15, 2000. [7] The limitation, "arranged underneath" means disposed directly beneath the seat cushion assembly. Prosecution history of the '701 patent, pp. 12-13, ATI's Amendment dated Aug. 15, 2000; Merriam-Webster Collegiate Dictionary, 11 ed. p. 1364 (2003). [8] The phrase, "adapted to support" is a limitation because it is material to the patentability. This limitation requires the support structure to support the seat cushion assembly and the seat back assembly on the substrate of the vehicle. *See* Prosecution history of the '701 patent, p. 12, ATI's Amendment dated Aug. 15, 2000. [9] The limitation, "on a substrate" means on the floor of a vehicle. Prosecution history of the '701 patent, p. 14, ATI's Amendment dated Aug. 15, 2000; col. 28, line 39. [10] This limitation means that the support structure is placed underneath the seat cushion

			assembly and supports the same on the floor of the vehicle and that the support structure is deformed or strained to bear the transferred force therethrough. Prosecution history of the '701 patent, p.12, ATI's Amendment dated Aug. 15, 2000.
[11] **at least one** [12] **strain gage transducer**, each of said at least one strain gage transducer being [13] **mounted** at [14] **a respective location on said support structure** [15] **arranged to provide a measurement of the strain of said support structure at the location at which said strain gage transducer is mounted**, and	[11] **at least one** [12] **strain gage transducer** [13] **mounted** [14] **a respective location on said support structure** [15] **arranged to provide a measurement of the strain of said support structure at the location at which said strain gage transducer is mounted**		[11] The limitation, "at least one" means only one or more than one. *Rhine v. Casio, Inc.*, 183 F.3d 1342 (Fed. Cir. 1999). [12] The limitation, "strain gage transducer" means a transducer that measures deformation or strain of the support structure. Prosecution history of the '701 patent, p. 12, ATI's Amendment dated Aug. 15, 2000. [13] The term, "mounted" means placed on. Merriam-Webster's Collegiate Dictionary, 11 ed. p. 811 (2003). [14] The limitation, "a respective location on" means a separate location on the support structure. The '701 patent, col. 6, lines 10-26; Merriam-Webster's Collegiate Dictionary, 11 ed. p. 1061 (2003). [15] The limitation, "arranged to provide a measurement of the strain" means to measure the deformation or the strain of the support structure at a location on which the strain gage transducer is mounted. Prosecution history of the '701 patent, p. 12, ATI's Amendment dated Aug. 15, 2000.

[16] a **control system coupled to said at least one strain gage transducer for determining the weight of the occupying item** of the seat based on the strain of said support structure measured by said at least one strain gage transducer.	[16] a **control system coupled to said at least one strain gage transducer for determining the weight of the occupying item**		[16] The limitation, "control system" means a processor that receives the digitized signals for the measured deformation or strain from the strain gage transducer and calculates force that gravitation exerts upon a body, equal to the mass of the body times the local acceleration of gravity. The '701 patent, Col. 29, line 66- col. 30, line 6.
3. The seat of claim 1,			
further comprising [17] **electrical connection means for connecting said at least one strain gage transducer to said control system**.	ATI: ***electrical connection means for connecting*** HONDA ET AL.: [17] **electrical connection means for connecting said at least one strain gage transducer to said control system**.	Structure to electrically connect. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is connecting said at least one strain gage transducer to said control system. Structure to perform the function includes that described in the patent specification and equivalents,	[17] Electrical connection means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. The function of the electrical connection means is to connect the strain gage transducer to the control system. The structure for performing this function is wire and its equivalent. The '701 patent, col. 29, lines 31-58.

		such as wires. Col. 15, lines 59-62; col. 16, lines 16-19; col. 29, lines 39-51; figs. 3, 18.	
5. The seat of claim 4,			
wherein at least one of said transducers includes [18] **a strain gage element** and	[18] **a strain gage element** and		[18] The limitation, "a strain gage element" means a part of the strain gage transducer that measured deformation or strain. The '701 patent, col. 6, lines 6-9.
[19] **signal conditioning electronics** arranged [20] **adjacent** thereto.	[19] **signal conditioning electronics** [20] **adjacent**		[19] The limitation, "signal conditioning electronics" means a part of the strain gage transducer that conditions measured deformation or strain from the strain gage element. Signal conditioning electronics include, for example, amplifiers, analog-digital converters, and filters. The '701 patent, col. 29, lines 31-65. [20] The term, "adjacent" means "within the strain gage transducer." The '701 patent, col. 6, lines 6-9.
6. The seat of claim 1			
Wherein each of said at least one strain gage [sic. transducer] includes [21] **signal conditioning circuitry** and	[21] **signal conditioning circuitry**		[21] The limitation, "signal conditioning circuitry" means a part of the strain gage transducer that conditions the measured deformation or stain, except an analog to digital converter. The '701 patent, col. 29, lines 59-65

			and col. 33, lines 28-34.
[22] **an analog to digital converter** such that the measured strain is output as a digital signal.	[22] **an analog to digital converter**		[22] The limitation, "an analog to digital converter" means a circuit that digitizes the measured deformation or stain as a digital signal. The '701 patent, col. 6, lines 6-9

CLAIM 16 OF THE '701 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
An adjustment system for adjusting [23] **a component of a vehicle** based on [24] **occupancy of a seat**, comprising:	[23] **a component of a vehicle** [24] **occupancy of a seat**		[23] The limitation, "a component of a vehicle" means an adjustable part of the vehicle which is advantageously adjusted based on the occupancy and the identification of an occupying item. The '701 patent, col. 1, lines 26-41; Prosecution history of 08/970,822 (U.S. Pat. No. 6,081,757), pp. 6-10, ATI's Amendment dated July 12, 1997; Prosecution history of 09/128,490 (U.S. Pat. No. 6,078,854), pp. 6-11, ATI's Amendment dated July 15, 1999. [24] The limitation, "occupancy of a seat" means seated- state of a seat, which is construed at [35] below. The '701 patent, col. 1, lines 22-23; pp. 6-10, ATI's Amendment dated July 12, 1997 for 08/970,822 (U.S. Pat. No. 6,081,757).
[25] **at least one wave sensor** for [26] **receiving waves** from [27] **an area of the seat** in the [28] **passenger compartment** and generating an [29]	[25] **at least one wave sensor** [26] **receiving waves** [27] **an area of the seat**		[25] The limitation, "at least one wave sensor" means only one or more than one transducer that receives propagating signals that have a direction of propagation, velocity of propagation and a wavelength which depend on the property of materials and the type of waves (electromagnetic, acoustic, or mechanical). Wave sensors are

output representative of waves received by said at least one wave sensor;	[28] **passenger compartment** [29] **output representative of waves received**		ultrasonic sensors and beam-emitting sensors. Abstract; the '701 patent, Figs. 1 and 10; col. 13, line 62-col. 14, line 32; Denial of Interference for 08/905,877 (U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000). [26] The limitation, "receiving waves" means receiving reflected propagating signals. Abstract; col. 13, line 62-col. 14, line 32; [27] The limitation, "an area of the seat" means a space exterior to a contact surface or an occupying item. The '701 patent, *see* Figs. 1, 10 and 13 and col. 14, line 43. [28] The limitation, "passenger compartment" means a space that intends to be occupied by the passenger and the passenger's environment. *See* Fig. 14; Prosecution history of 09/448,337, p. 9, ATI's Amendment dated Nov. 21, 2000. [29] The limitation, "output representative of waves received" means a pattern of reflected waves. Abstract; Prosecution history of 08/640,068, Declaration under 37 C.F.R. 1.131 dated March 10, 1997.
the seat of claim 1, [30] **said** [31] **control system** being arranged to generate [32] **an output representative of the measured weight applied onto the seat**;	[30] **said** [31] **control system** [32] **an output representative of the**		[30] The term, "said" means previously recited. [31] *See* construction of [16] control system above. [32] The limitation, "an output representative of the measured weight applied onto the seat" means a signal that indicates the calculated force that

	measured weight applied onto the seat		gravitation exerts upon the occupying item, equal to the mass of the body times the local acceleration of gravity. The '701 patent, col. 29, line 66- col. 30, line 6
[33] **adjustment means arranged in connection with the component for adjusting the component**, and	ATI: ***adjustment means . . . for adjusting*** HONDA ET AL.: **adjustment means arranged in connection with the component for adjusting the component**	Structure to adjust. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is adjusting the component. Structure to perform the function includes that described in the patent specification and equivalents, such as power means including motors, control means such as a control circuit, system or module, actuation mechanisms, servomotors, lead screws, shafts, valves. Col. 10, line 60 - col. 11, line 7; col. 20, line 44 – col. 21, line 24; col. 21, lines 51-65; col. 22, 4-15; col. 22, lines 61-63; col. 25, lines 25-39; col. 27, lines 14-26; col. 28, lines 56-67; col. 29, lines 1-4; figs. 8, 10, 11, 13.	[33] The phrase "adjustment means" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶6. The function of the adjustment means is to adjust the component of a vehicle. The structure for performing this function is a motor and its equivalents and an inflator and its equivalents. The '701 patent, e.g., col. 4, lines 4-9, col. 22, lines 61-63, col. 25, lines 25-28, and col. 27, lines 20-26; and col. 24, lines 54-67.
[34] **processor means** for receiving the outputs from said at least one wave sensor and said control system and	[34] **processor means** [35] **seated-state of the seat**		[34] The phrase "processor means" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶6. The function of the processor means is to evaluate the seated-state of the seat and direct the adjustment means. The

evaluating the [35] **seated-state of the seat** based thereon and based at least on the [36] **evaluation of the seated-state of the seat**, directing said adjustment means to adjust the component.	[36] **evaluation of the seated-state of the seat**		structure for performing the function is a processor programmed with a pattern recognition algorithm adopting a neural network that identifies the occupant and controls the adjustment means. The '701 patent, col. 5, lines 31-34; col. 9, lines 51-56; and col. 25, lines 20-24; col. 26, lines 2-9; Prosecution history of 08/239,978, p.1, Response to Restriction dated Mar. 13, 1995; Prosecution history of 08/040,978, pp. 1-2, Response to Restriction dated Feb. 9, 1994. [35] The limitation, "seated-state of the seat" means all possible occupancy states (e.g., forward facing adult, rear facing child seat, or empty seat) including type or class of any occupying items, the size of any occupying items, the position of any occupying item including the orientation of the occupying item and/or status of any occupying item (whether the occupying item is conscious or unconscious) and at least one accessory of the occupying item (newspaper, books, maps, bottles, toys, hats, coats, boxes, bags and blankets). The '701 patent, col. 2, lines 11-28; and col. 20, lines 29-56; col. 13, lines 48-53; U.S. Pat. No. 6,529,809, col. 12, lines 15-24. [36] The term, "evaluation" means the identification of the occupying item and determination of whether adjustment of the component is desired and beneficial based on the identification. The '701 patent, e.g. col. 7, lines 43-62; Prosecution history of 08/970,822 (U.S. Pat. No. 6,081,757), pp. 6-10, ATI's Amendment dated July 12, 1999; Prosecution history of U.S. Pat. No.

			6,078,854, pp. 6-11, ATI's Amendment dated July 15, 1999.

3. U.S. PATENT NO. 6,325,414

CLAIM 1 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. A vehicle including an arrangement for controlling deployment of a side airbag from [1] **an airbag module** to protect an occupant in a seat of the vehicle in a crash, the arrangement comprising	[1] **an airbag module**		The preamble of claim 1 is limiting because deployment of a side airbag relates to patentability of claim 1. Prosecution history of 6,712,387 patent ("the '387 patent"), a parent of the '414 patent, pp. 4-5, ATI's Amendment filed on Nov. 6, 2006. [The prosecution history of the '387 patent is relevant to an understanding of the scope of a common term in the '414 patent, which is stemming from the application matured to the '387 patent. *Microsoft Corp. v. Multi-Tech Systems, Inc.*, 357 F.3d 1340 (Fed. Cir. 2004), *cert.* denied, 125 S. Ct. 61 (2004) (citing *E.g.*, *Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990); *see also* *Laitram Corp. v. Morehouse Indus., Inc.*, 143 F.3d 1456, 1460 n.2 (Fed. Cir. 1998).] [1] The limitation, "an airbag module" means a container that houses an un-inflated airbag *see* Fig. 9, item 332 and col. 1, lines 31-33.
[2] **determining means for determining the position of at least a part of the occupant**, and	[2] **determining means for determining the position of at least a part of the occupant**		[2] The phrase, "determining means" is not a means plus function element because it is modified by structure for performing the recited function. The phrase, "determining the position" means "determining the point or area in space actually occupying by the head and/or chest of the occupant relative to the air bag module. Determining a physical characteristic of the occupant such as determining the height is not determining the position because

CLAIM 1 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			determining the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 23-26; col. 17, lines 12-18; Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004).
[3] **a control circuit** [4] **coupled to** said determining means for [5] **controlling deployment** of the [6] **side airbag** based on the [7] **determined position** of the [8] **at least a part of the occupant**,	[3] **a control circuit** [4] **coupled to** [5] **controlling deployment** [6] **side airbag** [7] **determined position** [8] **at least a part of the occupant**,		[3] The term, "control circuit" means a part of the processor that controls deployment of the side airbag with a pattern recognition algorithm adopting an artificial neural network. *See* Fig. 9 and col. 1, lines 38-39 [4] The limitation, "coupled to" means "resident in" the processor as a part of the processor. *see* Fig. 9 and col. 1, lines 38-39 and prosecution history of the '414 patent, p. 4, ATI's Amendment dated May 7, 2001. [5] The limitation, "controlling deployment" means determining whether to deploy or not. Col. 6, lines 23-26; Col. 17, lines 5-11. [6] The limitation, "side airbag" means airbag for use in a lateral crash of a vehicle and located at a side of a vehicle. *see* Fig. 9, numeral 336; col. 1, lines 30-40; *see* col. 17, lines 12-18. [7] The phrase, "determined position" means "the determined point or area in space actually occupying by the head and/or chest of the occupant relative to the air bag module. A determined physical characteristic of the occupant such as the height is not the position because the determined position is a characteristic of the occupant's

CLAIM 1 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			relation to his or her environment. col. 6, lines 23-26; col. 17, lines 12-18; Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004). [8] The limitation, "at least a part of the occupant" means a body part of the occupant, i.e., a head and/or chest. e.g., col. 3, lines 14-22; col. 6, lines 23-26; Prosecution history of 08/040,978, pp. 1-2, ATI's Response to Restriction dated Feb. 9, 1994.
said determining means comprising [9] **at least one** [10] **receiver** arranged to receive [11] **electromagnetic waves** from [12] **a space** [13] **above** [14] **a seat portion** of the seat	[9] **at least one** [10] **receiver** [11] **electromagnetic waves** [12] **a space** [13] **above** [14] **a seat portion**		[9] The limitation, "at least one" means only one or more than one. *Rhine v. Casio, Inc.*, 183 F.3d 1342 (Fed. Cir. 1999). [10] The term, "receiver" means a dedicated receiver that only receives reflected waves or a transducer that receives reflected waves. A receiver or a transducer that does not receive electromagnetic waves, e.g., an ultrasonic receiver, or their equivalents, is excluded. col. 17, lines 5-23 [11] The term, "waves" means propagating signals that have a direction of propagation, velocity of propagation, and a wavelength which depend on the property of materials in which the waves exist and the type of waves (e.g., acoustic, mechanical, electromagnetic). The limitation, "electromagnetic waves" means a subset of the waves defined above. Figs.1-6 and col. 11, line 49 – col.

CLAIM 1 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			12, line 17; Denial of Interference for 08/905,877 (matured to U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000). [12]-[14] The limitation, "a space above a seat portion" means a space higher than the portion of the seat where a passenger places their buttocks as opposed to the back portion which supports the passenger's back.. *See* Figs. 1-19; Merriam-Webster's Collegiate Dictionary, 11 ed. p. 4 (2003).
and [15] **a processor** coupled to said at least one receiver for generating [16] **a signal representative of the position** of the at least a part of the occupant based on [17] **the waves received by said at least one receiver**.	[15] **a processor** [16] **a signal representative of the position** [17] **the waves received by said at least one receiver**.		[15] The term, "processor" means a device programmed with a pattern recognition algorithm adopting an artificial neural network. *see* e.g. col. 12, line 14- col. 13, line 16. [16] The limitation, "a signal representative of the position" means a signal that represents the point or area in space actually occupying by the head and/or chest of the occupant relative to the side airbag module. Determining a physical characteristic of the occupant such as determining the height is not determining the position because determining the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 23-26; col. 17, lines 12-18; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004); Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000. [17] The phrase, "waves received by said at least one receiver" means propagating signals that are modified or reflected by the part of the occupant and that are received

CLAIM 1 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			by the receiver. col. 11, lines 45- col. 12, line 13; col. 17, lines 19-21.

CLAIM 5 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
5. A vehicle including an arrangement for controlling deployment of a side airbag from an airbag module to protect an occupant in a seat of a vehicle in a crash, the arrangement comprising			
determining means for determining the position of at least a part of the occupant, and			
a control circuit coupled to said determining means for controlling deployment of the side airbag based on the determined position of the at least a part of the occupant,			
said determining means comprising a [18] **transmitter** [19] **arranged** to transmit [20] **waves** into a space above a seat portion of the seat, and	[18] **transmitter** [19] **arranged** [20] **waves**		[18] The term, "transmitter" means a dedicated transmitter that only transmits propagating signals or a transducer that transmits propagating signals. col. 17, lines 15-23 [19] The term, "arranged" means mounted or installed. *see* e.g. col. 12, lines 2-5 [20] The term, "waves" means propagating signals that have a direction of propagation, velocity of

CLAIM 5 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			propagation, and a wavelength which depend on the property of materials in which the waves exist and the type of waves (e.g., acoustic, mechanical, electromagnetic). Figs.1-6 and col. 11, line 49 – col. 12, line 17.
at least one [21] **receiver** arranged to receive waves transmitted by said transmitter from the space above the seat portion of the seat and	[21] **receiver**		The term, "receiver" means a dedicated receiver that only receives reflected waves or a transducer that receives reflected waves. A receiver or a transducer that does not receive electromagnetic waves, e.g., an ultrasonic receiver, or their equivalents, is excluded. col. 17, lines 5-23
a [22] **processor** coupled to said at least one receiver for generating a signal representative of the position of the at least a part of the occupant based on the waves received by said at least one receiver.	[22] **processor**		The term, "processor" means a device programmed with a pattern recognition algorithm adopting an artificial neural network. *see* e.g. col. 12, line 14-col. 13, line 16.

CLAIM 10 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
10. A vehicle including an arrangement for controlling deployment of a side airbag from an airbag module to protect an occupant in a seat of a vehicle in a crash, the arrangement comprising			

CLAIM 10 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
[23] **determining means for determining the position of at least a part of the occupant**, and	ATI: ***determining means for determining the position*** [23] **determining means for determining the position of at least a part of the occupant**	Structure that determines the position, including transducers, transmitters, receivers, receptors, and resonators. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is determining the position of at least a part of the occupant. Structure to perform the function includes that described in the patent specification and equivalents, such as a wave receiving transducer, an ultrasonic transducer or an electromagnetic wave receiver (CCD, CMOS, antenna). Structure can also include transmitter means for transmitting waves and receiver means to receive waves. Col. 11, line 49 – col. 12, line 13; col. 14, line 65 – col. 15, line 1; col. 16, lines 21-25; col. 16, lines 47-55; col. 17, lines 12-15; col. 20, lines 51-56; col. 21, lines 24-27; col. 22, lines 52-55; col. 18-23; figs. 1, 1A, 4, 6, 7A, 7B, 8, 9, 14, 15, 18, 19.	[23] The phrase, "determining means" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶ 6. The function for the "determining means" is to determine the position of at least a part of the occupant. The structure for performing this function is an ultrasonic transducer and its equivalent as well as wave-receiving transducers described in the embodiments and a processor programmed with a pattern recognition algorithm employing an artificial neural network. col. 17, lines 5-23, and *see* e.g. col. 12, line 14- col. 13, line 16. The phrase, "determining the position" means "determining the point or area in space actually occupying by the head and/or chest of the occupant relative to the air bag module. Determining a physical characteristic of the occupant such as determining the height is not determining the position because determining the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 23-26; col. 17, lines 12-18; *Automotive Technologies International, Inc. v.*

CLAIM 10 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			Delphi Corp. No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004); Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000.
[24] **a control circuit** coupled to said determining means for controlling deployment of the side airbag based on the determined position of the at least a part of the occupant.	[24] **a control circuit**		[24] The term, "control circuit" means a part of the processor that controls deployment of the side airbag with a pattern recognition algorithm adopting an artificial neural network. Fig. 9, item 101B and col. 1, lines 38-39.
said control circuit being arranged to control deployment of the side airbag by [25] **suppressing deployment** of the side airbag, [26] **controlling a time at which deployment of the side airbag starts**, [27] **controlling a rate of gas flow into the side airbag**, [28] **controlling a rate of gas flow out of the side airbag** or [29] **controlling a rate of deployment of the side airbag**.	[25] **suppressing deployment** [26] **controlling a time at which deployment of the side airbag starts**, [27] **controlling a rate of gas flow into the side airbag**, [28] **controlling a rate of gas flow out of the side airbag**		[25] The limitation, "suppressing deployment" means preventing deployment. col. 17, line 5-11 [26] The limitation, "controlling a time at which deployment of the side airbag starts" means control when to begin deployment of the side airbag. *see* col. 6, lines 7-12, and col. 17, lines 5-11. [27] The limitation, "controlling a rate of gas flow into the side airbag" means controlling the volume rate of gas flowing into the side airbag. Col. 6, lines 7-12. [28] The limitation, "controlling a rate of gas flow out of the side

CLAIM 10 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
	[29] **controlling a rate of deployment of the side airbag**.		airbag" means controlling the volume rate of gas flowing out of the side airbag. Col. 6, lines 7-12. [29] The limitation, "controlling a rate of deployment of the side airbag" means controlling the volume rate and the amount of gas flowing into the side airbag. Col. 6, lines 7-12.

CLAIM 11 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
11. A vehicle including an arrangement for controlling deployment of a side airbag from an airbag module to protect an occupant in a seat of a vehicle in a crash, the arrangement comprising			
[30] **determining means for determining whether an occupant is present in the seat**, and	[30] **determining means for determining whether an occupant is**		[30] The phrase, "determining means" is not a means plus function element because it is modified by structure for performing the recited function. The phrase, "determining whether an occupant seat is present in the seat" means determining whether the seat is occupied or not.

CLAIM 11 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
	present in the seat,		Col. 17, lines 12-23 and prosecution history of the '387 patent, election of species (Fig. 9) dated May 8, 2000.
[31] **a control circuit coupled to said determining means for controlling deployment of the side airbag based on whether an occupant is present in the seat**,	[31] **a control circuit coupled to said determining means for controlling deployment of the side airbag based on whether an occupant is present in the seat**,		[31] This limitation means that a control circuit controls deployment of the side airbag with a pattern recognition algorithm adopting an artificial neural network. The control circuit is "resident in" the processor as a part of the processor. *see* Fig. 9 and col. 1, lines 38-39 and prosecution history of the '414 patent, p. 4, ATI's Amendment dated May 7, 2001.
said determining means comprising at least one receiver arranged to receive electromagnetic waves from a space above a seat portion of the seat and			
a processor coupled to said at least one receiver for generating [32] **a signal representative of the presence or absence of an occupant in the seat** based on the waves received by said at least one receiver.	[32] **a signal representative of the presence or absence of an occupant in the seat**		[32] The limitation, "a signal representative of the presence or absence of an occupant in the seat" means a signal that represents whether the seat is occupied or not. *See* Prosecution history of the '387 patent, election of species (Fig. 9) dated May 8, 2000.

CLAIM 11 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT

CLAIM 24 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
24. [33] **A method for controlling deployment of a side airbag** from an airbag module to protect an occupant in a seat of a vehicle in a crash, comprising [34] **the steps of**:	[33] **A method for controlling deployment of a side airbag** [34] **the steps of**:		[33] This preamble is limiting because it relates to patentability of claim 24. pp. 4-5, ATI's Amendment filed on Nov. 6, 2006 of the '387 patent [34] The phrase, "the steps of" means a combination of the steps.
determining the position of at least a part of the occupant by transmitting waves into a space above a seat portion of the seat,			
[35] **receiving waves** from the space above the seat portion of the seat and	[35] **receiving waves**		[35] The limitation, "receiving waves" means receiving reflected propagating signals that have the propagating direction toward a space higher than a seat portion. Col. 17, lines 5-23.
[36] **generating a signal representative of the position of the at least a part of the occupant** based on the received waves, and	[36] **generating a signal representative of the position of the**		[36] The limitation means generating a signal that represents the point or area in space actually occupying by the head and/or chest of the occupant relative to

CLAIM 24 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
	at least a part of the occupant		the side air bag module through use of a processor programmed with a pattern recognition algorithm employing an artificial neural network. Determining a physical characteristic of the occupant such as the height is not the position because the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 23-26; col. 17, lines 12-18; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004); Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000.
[37] **controlling deployment of the side airbag** based on the determined position of the at least a part of the occupant.	[37] **controlling deployment of the side airbag**		[37] This limitation means determining whether to deploy the side airbag or not through use of a control circuit resident in a processor programmed with a pattern recognition algorithm adopting a trained neural network. Col. 6, lines 23-26; col. 17, lines 5-11

CLAIM 31 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
31. [38] **A method for controlling deployment of a side airbag** from an airbag module to protect an occupant in a seat of a vehicle in a	[38] **A method for controlling deployment of a side airbag**		[38] This preamble is limiting because it relates to patentability of claim 31. pp. 4-5, ATI's Amendment filed on Nov. 6, 2006 of the '387 patent

CLAIM 31 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
crash, comprising [39] **the steps of**:	[39] **the steps of**:		[39] The phrase, "the steps of" means a combination of the steps.
[40] **determining the position of at least a part of the occupant**, and	[40] **determining the position of at least a part of the occupant**, and		[40] This limitation is a step plus function limitation and should be construed under 35 U.S.C. § 112 ¶ 6. This limitation recites the underlying function, i.e., "what this limitation ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish." There is no indication of how to accomplish the function. *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002); *Cummins-Allison Corp. v. Glory Ltd.*, 2003 WL 355470 (N.D. Ill. Feb. 12, 2003). The function is to determine the position of a part of the occupant. The act for performing this function is transmitting and receiving reflected waves which are modified by a part of the occupant using limitation means determining whether to deploy the side airbag or not through use of an ultrasonic transducer and its equivalent as well as wave-receiving transducers described in the embodiments and a processor programmed with a pattern recognition algorithm employing an artificial neural network. col. 17, lines 5-23. The phrase, "determining the position" means "determining the point or area in space actually occupying by the head and/or chest of the

CLAIM 31 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			occupant relative to the air bag module. Determining a physical characteristic of the occupant such as determining the height is not determining the position because determining the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 23-26; col. 17, lines 12-18; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004); Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000.
[41] **controlling deployment of the side airbag** based on the determined position of the at least a part of the occupant,	[41] **controlling deployment of the side airbag**		[41] The limitation means determining whether to deploy the side airbag or not. Col. 6, lines 23-26; col. 17, lines 5-11.
the step of controlling deployment of the side airbag comprising [42] **at least one of the steps of** suppressing deployment of the side airbag, controlling a time at which deployment of the side airbag starts, controlling a rate of gas flow into the side airbag, controlling a rate of gas flow out of the side airbag and controlling a rate of deployment of the side airbag.	[42] **at least one of the steps of**		[42] The phrase, "at least one of the steps of A, B, C, D and E" means only one step of A, B, C, D and E, or more than one step of A, B, C, D and E. *Rhine v. Casio, Inc.*, 183 F.3d 1342 (Fed. Cir. 1999).

CLAIM 31 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT

CLAIM 41 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
41. [43] **A method for controlling deployment of a side airbag** from an airbag module to protect an occupant in a seat of a vehicle in a crash, comprising [44] **the steps of**:	[43] **A method for controlling deployment of a side airbag** [44] **the steps of**:		[43] This preamble is limiting because it relates to patentability of claim 41. Prosecution history of the '387 patent, pp. 4-5, ATI's Amendment filed on Nov. 6, 2006. [44] The phrase, "the steps of" means a combination of steps.
[45] **determining whether an occupant is present in the seat**, and	[45] **determining whether an occupant is present in the seat**, and		[45] This limitation is a step plus function limitation and should be construed under 35 U.S.C. § 112 ¶ 6. This limitation recites the underlying function, i.e., "what this limitation ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish." There is no indication of how to accomplish the function. *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002); *Cummins-Allison Corp. v. Glory Ltd.*, 2003 WL 355470 (N.D. Ill. Feb. 12, 2003).

CLAIM 41 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			The function is to determine whether the seat is occupied or not. The act for performing this function is transmitting and receiving reflected waves which are modified by a part of the occupant using the limitation means determining whether to deploy the side airbag or not through use of an ultrasonic transducer and its equivalent as well as wave-receiving transducers described in the embodiments and a processor programmed with a pattern recognition algorithm employing an artificial neural network. Col. 17, lines 5-23; Prosecution history of the '387 patent, election of species May 8, 2000.
[46] **controlling deployment of the side airbag** based on the [47] **presence or absence of an occupant in the seat**,	[46] **controlling deployment of the side airbag** [47] **presence or absence of an occupant in the seat**,		[46] The limitation means determining whether to deploy the side airbag or not with a control circuit, which is part of the processor. Col. 6, lines 23-26; col. 17, lines 5-11. [47] The limitation, "presence or absence of an occupant in the seat" means whether the seat is occupied or not. Col. 17, lines 5-23.
the step of controlling deployment of the side airbag comprising at least one of [48] **the steps of** **suppressing deployment of the side airbag controlling a time at which deployment of the side**	[48] **the steps of** **suppressing deployment of the side airbag controlling a time at which deployment of the**		[48] This limitation means: "suppressing deployment" means preventing deployment; col. 17, line 5-11 "controlling a time at which deployment of the side airbag starts" means control when to begin deployment of the side airbag; *see* col. 6, lines 7-

CLAIM 41 OF THE '414 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
airbag starts, controlling a rate of gas flow into the side airbag, controlling a rate of gas flow out of the side airbag and controlling a rate of deployment of the side airbag.	**side airbag starts, controlling a rate of gas flow into the side airbag, controlling a rate of gas flow out of the side airbag and controlling a rate of deployment of the side airbag**.		12, and col. 17, lines 5-11 "controlling a rate of gas flow into the side airbag" means controlling the volume rate of gas flowing into the side airbag. Col. 6, lines 7-12. "controlling a rate of gas flow out of the side airbag" means controlling the volume rate of gas flowing out of the side airbag; Col. 6, lines 7-12 "controlling a rate of deployment of the side airbag" means controlling the volume rate and the amount of gas flowing into the side airbag. Col. 6, lines 7-12.

4. U.S. PATENT NO. 6,397,136

CLAIMS 1, 6-10, 25 and 27 OF THE '136 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. A system for determining [1] **the occupancy state of a seat** in a vehicle [2] **in combination with the vehicle**, the system comprising:	[1] **the occupancy state of a seat** [2] **in combination with the vehicle**		[1] The phrase, "occupancy state of the seat" means all possible occupancy states (e.g., forward facing adult, rear facing child seat, or empty seat) including type or class of any occupying items, the size of any occupying items, the position of any occupying item including the orientation of the occupying item and/or status of any occupying item (whether the occupying item is conscious or unconscious) and at least one accessory of the occupying item (newspaper, books, maps, bottles, toys, hats, coats, boxes, bags and blankets). Thus, "determining the occupancy state" means determining the specific occupancy state from these multiple possible occupancy states using a processor employing a trained pattern recognition algorithm that adopts a neural network. col. 32, line 66- col. 33, line 11; col. 20, lines 1-5; U.S. Pat. No. 6,529,809, col. 12, lines 15-24. [2] The phrase, "in combination with the vehicle" means the system for determining the occupancy state of a seat is placed in the vehicle. Prosecution history of the '136 patent, Paper # 14, p. 6, ATI's Amendment dated July 19, 2001
[3] **a plurality of** [4] **transducers** [5] **arranged in the vehicle**, each of said transducers [6] **providing data**	[3] **a plurality of** [4] **transducers**		[3] The phrase, "a plurality of" means two or more. *York Prods., Inc. v. Cent. Tractor Farm & FamilyCtr*, 99 F.3d 1568 (Fed. Cir. 1996).

relating to the occupancy state of the seat; and	[5] **arranged in the vehicle** [6] **providing data relating to the occupancy state of the seat**;		[4] The terms, "transducers" means the combination of a transmitter and a receiver, or a receiver which is positioned in the specific location relative to other transducers and to the seat. col. 7, lines 5-10; Denial of Interference for 08/905,877 (U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000); Prosecution history of 08/798,029, pp. 9-10, Amendment dated Feb. 24, 1999. [5] The limitation, "arranged in the vehicle" means mounted or installed in the vehicle. col. 17, lines 7-9 [6] The limitation, "providing data relating to the occupancy state of the seat" means providing information from one transducer without being combined with information from the other transducer prior to or during processing. col. 5, lines 30-54 and Prosecution history of the '136 patent, Annex, ATI's Amendment dated July 19, 2001.
[7] **processor means coupled to said transducers for receiving the data from said transducers and processing the data to obtain an output indicative of the current occupancy state of the seat**,	[7] **processor means coupled to said transducers for receiving the data from said transducers and processing the data to obtain an output indicative of the current occupancy state of the seat**,		[7] This limitation means that the neural network receives information from each transducer as a separate input and produces the output that reflects different patterns from all of the transducers during a certain time period. Fig. 1, col. 5, lines 30-54; col. 23, lines 28-43 and Prosecution history of the '136 patent, Paper # 14, p. 7 and Annex, ATI's Amendment dated July 19, 2001;
said processor means comprising [8] **a trained**	ATI: ***a trained pattern***	An algorithm derived by pattern training.	[8] The limitation, "trained pattern recognition algorithm" means an algorithm that is taught how to

pattern recognition algorithm created from a plurality of data sets,	***recognition algorithm*** HONDA ET AL.: [8] **a trained pattern recognition algorithm created from a plurality of data sets**,	Col. 5, line 65 – col. 6, line 23; col. 9, lines 18-20; col. 23, lines 37-40; col. 26, lines 25-34.	recognize occupancy states by subjecting the algorithm to examples and that automatically generates the best neural network upon input of the data based on the training. col. 6, lines 20-23; col. 13, lines 3-7; Prosecution history of the '136 patent, Paper # 15, Declaration of David Breed dated July 10, 2001.
[9] **each of said data sets representing a different occupancy state of the seat and being formed from data from said transducers while the seat is in that occupancy state**,	[9] **each of said data sets representing a different occupancy state of the seat and being formed from data from said transducers while the seat is in that occupancy state**,		[9] This limitation means that information from each transducer has a different pattern of the currently occupying item in the seat or a vacancy of the seat during a certain time period. Col. 26, lines 31-34.
[10] **trained pattern recognition algorithm producing the output indicative of the current occupancy state of the seat upon inputting a data set representing the current occupancy state of the seat and being formed from data from said transducers**.	[10] **trained pattern recognition algorithm producing the output indicative of the current occupancy state of the seat upon inputting a data set representing**		[10] This limitation means that upon the input of data, the trained pattern recognition algorithm produces the output that reflects different patterns from all of the transducers during a certain time period by inputting the different patterns from all of the transducers into an algorithm generating program which automatically creates the best neural network which can operationally receive input and provide output based its training. col. 20, lines 46-48; Prosecution history of the '136

	the current occupancy state of the seat and being formed from data from said transducers.		patent, Paper #14, Annex, ATI's Amendment dated July 19, 2001 and Paper # 15, ¶ 8, Declaration of David S. Breed.
6. The vehicle of claim 1,			
wherein said transducers include a plurality of [11] **weight sensors**, each of said weight sensors [12] **measuring the weight applied onto the seat at a different location**.	[11] **weight sensors** [12] **measuring the weight applied onto the seat at a different location**.		[11] The limitation, "weight sensors" means a transducer that is directly connected to the vehicle seat containing the occupying item and calculates the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity. Col. 13, lines 30-40; col. 22, lines 26-44 [12] The limitation, "measuring the weight applied onto the seat at a different location" means calculates the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity. Col. 13, lines 30-40; col. 22, lines 26-44
7. The vehicle of claim 1,			
wherein said transducers include a weight sensor arranged to measure the weight applied to [13] **a surface of a seat portion** of the seat.	[13] **a surface of a seat portion**		[13] The limitation, "a surface of a seat portion" means a seated surface of the horizontally situated portion of the seat where a passenger places their buttocks as opposed to the back portion which supports the passenger's back.

			Col. 13, lines 30-40; col. 22, lines 26-44 and Fig. 1.
8. The vehicle of claim 1,			
wherein said transducers include [14] **a force, pressure or strain gage** [15] **arranged to measure the weight applied to the entire seat**.	[14] **a force, pressure or strain gage** [15] **arranged to measure the weight applied to the entire seat**.		[14] The limitation, "a force, pressure or strain gage" means one of a force transducer, a pressure transducer and a strain gage transducer. Col. 13, lines 30-40; col. 22, lines 26-44. [15] The limitation, "arranged to measure the weight applied to the entire seat" means to calculate the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity, on the seat structural members. Col. 13, lines 30-40; col. 22, lines 26-44, Fig. 1, item 7.
9. The vehicle of claim 8,			
wherein the seat includes [16] **a support structure for supporting the seat above a floor of a passenger compartment of the vehicle**, said force, pressure or strain gage [17] **being attached to** the support structure.	[16] **a support structure for supporting the seat above a floor of a passenger compartment of the vehicle** [17] **being attached to**		[16] The limitation, "a support structure for supporting the seat above a floor of a passenger compartment of the vehicle" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶6. The function for the support structure is to support the seat above a floor of the vehicle. The structure for supporting the seat is a seat track. Fig. 1, structure where numeral 10 is attached.

			[17] The limitation, "being attached to" means mounted on the support structure and between the seat and the floor of the vehicle. Fig. 1, numeral 7 and col. 22, lines 40-41.
10. The vehicle of claim 1,			
wherein said transducers include a plurality of [18] **electromagnetic wave sensors** [19] **capable of receiving waves** [20] **at least from a space above the seat**, each of said electromagnetic wave sensors [21] **being arranged at a different location**.	[18] **electromagnetic wave sensors** [19] **capable of receiving waves** [20] **at least from a space above the seat** [21] **being arranged at a different location**.		[18] The limitation, "electromagnetic wave sensors" is defined as a transducer or a receiver that receives reflected electromagnetic waves. The phrase, "electromagnetic waves" is as a subset of waves which are defined as: propagating signals that have a direction of propagation, velocity of propagation, and a wavelength which depend from the property of materials and the type of waves (acoustics, electromagnetic, or mechanical). Col. 7, lines 5-10; Denial of Interference of 08/905,877 (U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000). [19] The limitation, "capable of receiving waves" means receiving reflected propagating signals. Col. 25, lines 1-6; col. 26, lines 31-34. [20] The limitation, "at least from a space above the seat" means a space higher than the horizontally situated portion of the seat where a passenger places their buttocks as opposed to the back portion which supports the passenger's back. col. 13, lines 30-40; col. 22, lines 26-44, and Fig. 1; Merriam-Webster Collegiate Dictionary, 11ed. p. 4 (2003)

			[21] The limitation, "being arranged at a different location" means mounted or installed at a location that is not combined with reflected waves from other electromagnetic wave sensors. col. 23, lines 28-42; Prosecution history of 08/798,029, pp. 9-10, Amendment dated Feb. 24, 1999.
25. The vehicle of claim 1,			
further comprising [22] **control means coupled to said processor means for controlling a component or device in the vehicle in consideration of the output indicative of the current occupancy state of the seat obtained from said processor means**.	ATI: ***control means coupled to said processor means for controlling*** HONDA ET AL.: [22] **control means coupled to said processor means for controlling a component or device in the vehicle in consideration of the output indicative of the current occupancy state of the seat obtained from said processor means**.	Structure coupled to said processing means that controls. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is controlling a component or device in the vehicle in consideration of the output indicative of the current occupancy state of the seat. Structure to perform the function includes that described in the patent specification and equivalents, such as control circuitry. Col. 11, line 63 – col. 12, line 27; col. 14, lines 8-23; col. 23, lines 40-43; col. 24, lines 9-40.	[22] "Control means" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶6. The function for the control means is to control a component or device in the vehicle. The structure for performing the function is not disclosed in the specification. Accordingly, claim 25 is invalid as indefinite. *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106 (Fed. Cir. 2002).

27. The vehicle of claim 1,			
wherein said transducers include sensors capable of [23] **receiving waves modified by passing through a space above the seat**.	[23] **receiving waves modified by passing through a space above the seat**.		[23] The limitation, "receiving waves modified by passing through a space above the seat" means receiving waves reflected by an object in a space higher than the horizontally situated portion of the seat where a passenger places their buttocks as opposed to the back portion which supports the passenger's back. Col. 25, lines 2-6.

CLAIMS 29 and 31 OF THE '136 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
29. A system for determining the occupancy state of a seat in a vehicle in combination with the vehicle, the system comprising:			
a plurality of transducers arranged in the vehicle, each of said transducers generating only [24] **a single stream of data** relating to the occupancy state of the seat, and	[24] **a single stream of data**		[24] The phrase, "a single stream of data" means information from each transducer without being combined with information from another transducer prior to or during processing. Col. 23, lines 28-43.
[25] **processor means coupled**	[25] **processor**		[25] This limitation means that the neural network

to said transducers for receiving only the single stream of data from each of said transducers such that the stream of data from each of said transducers is passed to said processor means from said transducer without combining with another stream of data and processing the streams of data to obtain an output indicative of the current occupancy state of the seat,	**means coupled to said transducers for receiving only the single stream of data from each of said transducers such that the stream of data from each of said transducers is passed to said processor means from said transducer without combining with another stream of data and processing the streams of data to obtain an output indicative of the current occupancy state of the seat**,		receives information from each transducer as a separate input and that the neural network produces the output that reflects different patterns from all of the transducers during a certain time period. col. 6, lines 20-23; col. 13, lines 3-7; Prosecution history of the '136 patent, Paper # 15, Declaration of David Breed dated July 10, 2001.
said processor means comprising [26] **an algorithm created from a plurality of data sets**,	[26] **an algorithm created from a plurality of data sets**,		[26] The limitation means an algorithm that is taught how to recognize occupancy states by subjecting the algorithm to examples and that automatically generates the best neural network upon input of the data based on the training. col. 6, lines 20-23; Prosecution history of the '136 patent, Paper # 15, Declaration of David Breed dated July 10, 2001; col. 13, lines 3-7.
each of said data sets representing [27] **a different**	[27] **a different occupancy state of**		[27] This limitation means that information from each transducer has a unique pattern of the currently

occupancy state of the seat and being formed from [28] **separate streams of data**,	**the seat** [28] **separate streams of data**,		occupying item in the seat or a vacancy of the seat during a certain time period. Col. 26, lines 31-34; Prosecution history of 08/640,068, Declaration under 37 C.F.R. 1.131 dated March 10, 1997. [28] The "separate streams of data" means information from one transducer that is not combined with information from the other transducer prior to or during processing by the neural network. col. 5, lines 30-54 and col. 23, lines 28-43 and Prosecution history of the '136 patent, Paper # 14, p. 7 and Annex, ATI's Amendment dated July 19, 2001.
each only from one of said transducers, while the seat is in that occupancy state,			
[29] **said algorithm producing the output indicative of the current occupancy state of the seat upon inputting a data set representing the current occupancy state of the seat and being formed from separate streams of data, each only from one of said transducers**.	[29] **said algorithm producing the output indicative of the current occupancy state of the seat upon inputting a data set representing the current occupancy state of the seat and being formed from separate streams of data, each only**		[29] This limitation means that upon the input of data, the algorithm automatically creates the best neural network that produces the output that reflects different patterns from all of the transducers during a certain time period. col. 20, lines 46-48; Prosecution history of the '136 patent, Paper # 14, Annex, ATI's Amendment dated July 19, 2001.

	from one of said transducers.		
31. The vehicle of claim 29,			
wherein one of said transducers is a weight sensor [30] **arranged in the seat**.	[30] **arranged in the seat**.		[30] The limitation, "arranged in the seat" means mounted into the seat. Col. 22, lines 26-29.

CLAIM 69 OF THE '136 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
A system for determining the occupancy state of a seat in a vehicle in combination with the vehicle, the system comprising:			
a plurality of transducers arranged in the vehicle, each of said transducers providing data relating to the occupancy state of the seat,			
at least one of said transducers being [31] **a capacitive or electric field sensor**; and	[31] **a capacitive or electric field sensor**;		[31] The phrase, "a capacitive or electric field sensor" is indefinite because it is defined as both a beam-emitting sensor and a non-beam-emitting sensor in the specification. Col. 7, lines 5-13; col. 7, lines 57-63; If this phrase needs to be construed, it means a non-

			beam-emitting sensor including a transmitter electrode and a receiver electrode that monitors changes in capacitance at the receiver electrode." U.S. Pat. Nos. 5,366,241, 5,602,734, 5,691,693, 5,802,479, 5,844,486, and 5,948,031.
processor means coupled to said transducers for receiving the data from said transducers and processing the data to obtain an output indicative of the current occupancy state of the seat,			
said processor means comprising an algorithm created from a plurality of data sets,			
each of said data sets representing a different occupancy state of the seat and being formed from data from said transducers while the seat is in that occupancy state,	ATI: ***a different occupancy state***	One of many variable occupancy states. Col. 1, lines 40-48; col. 6, lines 37-43; col. 14, lines 8-15; figs. 1, 2, 3, 4, 5, 7.	See [27] above: [27] This limitation means that information from each transducer has a unique pattern of the currently occupying item in the seat or a vacancy of the seat during a certain time period. Col. 26, lines 31-34; Prosecution history of 08/640,068, Declaration under 37 C.F.R. 1.131 dated March 10, 1997.
said algorithm producing the output indicative of the current [32] **occupancy state of the seat upon inputting a data set representing the**	[32] **occupancy state of the seat upon inputting a data set representing the current occupancy state of the seat and being formed**		[32] This limitation means that upon the input of data, the algorithm automatically generates the best neural network which produces the output that reflects different patterns from all of the transducers during a certain time period. The algorithm is taught

current occupancy state of the seat and being formed from data from said transducers.	**from data from said transducers**.		how to recognize occupancy states by subjecting the algorithm to examples and automatically generates the best neural network upon input of the data based on the training col. 6, lines 20-23; col. 13, lines 3-7; col. 20, lines 46-48; Prosecution history of the '136 patent, Paper # 14, Annex, ATI's Amendment dated July 19, 2001; e.g. Col. 26, lines 31-34; Paper #15, Declaration of David Breed dated July 10, 2001.

5. U.S. PATENT NO. 6,422,595

CLAIMS 13 and 25 OF THE '595 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
13. A vehicle including an arrangement for controlling [1] **a vehicular component**, the arrangement comprising:	[1] **a vehicular component**		[1] The phrase, "a vehicular component" means a component which would have a variable operation depending on the position of the occupying item, e.g., an airbag. The '595 patent, col. 24, lines 27-31.
[2] **means for obtaining information or data about an occupying item of a seat**,	ATI: ***means for obtaining information or data*** HONDA ET AL.: [2] **means for obtaining information or data about an occupying item of a seat**	Structure that obtains information or data. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is obtaining information or data about an occupying item of a seat. Structure to perform the function includes that described in the patent specification and equivalents, such as receiver arrays, single axis phase array antenna, a scanning radar beam or array of light beams which convert light, including infrared and ultraviolet radiation, into electrical signals. The structure can also include sensors using microwaves, acoustics,	[2] The limitation, "means for obtaining information or data" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶ 6. The function of the means for obtaining is to obtain information or data about an occupying item of a seat. The structure for performing this function is transducers that receive acoustic waves (ultrasound) or electromagnetic waves (beam-emitting) modified by the occupying item of the seat. The '595 patent, col. 8, lines 7-12, col. 16, lines 30-37 and col. 18, line 46-col. 19, line 30; col. 5, line 42- col. 6, line 5; col. 24, lines 25-26; Denial of Interference for 08/905,877 (U.S. Pat. No. 6,186,537)(B.P.A.I. Jun. 7, 2000).

		optics, antenna, seat position sensor, and seatbelt spool out sensor. Col. 6, line 66 – col. 7, line 17; col. 7, line 66 – col. 8, line 13; col. 10, lines 59-67; col. 11, line 1 – col. 13, line 13; col. 15, lines 23-29; col. 15, lines 46-62; col. 16, lines 6-18; col. 17, lines 38-60.	
[3] **a pattern recognition system** for [4] **receiving the information or data about the occupying item** and [5] **analyzing the information or data about the occupying item** with respect to [6] **at least one characteristic selected from a group consisting of size, position, shape, and motion**, and	[3] **a pattern recognition system** [4] **receiving the information or data about the occupying item** [5] **analyzing the information or data about the occupying item** [6] **at least one characteristic selected from a group consisting of size, position, shape, and motion**		[3] The "pattern recognition system" means a processor employing an artificial neural network which differentiates between the occupant (his or her head and chest) and his extremities (hands and arms) and differentiates an occupant from an inanimate object. The '595 patent, col. 6, lines 24-32 [4] The limitation, "receiving the information or data about the occupying item" means receiving patterns of reflected waves that indicate size, position, shape and/or motion. The '595 patent, col. 7, line 59 and col. 8, line 32; Abstract; Prosecution history of 08/640,068, Declaration under 37 C.F.R. 1.131 dated March 10, 1997. [5] The limitation, "analyzing the information or data about the occupying item" means determining changes in patterns of reflected waves that indicate size, position, shape and/or motion, which affects the proximity of the occupying item relative to a

			vehicular component. The '595 patent, col. 8, lines 62-66; col. 15, lines 23-46; Prosecution history of 08/640,068, Declaration under 37 C.F.R. 1.131 dated March 10, 1997. [6] The phrase, "at least one characteristic selected from a group consisting of size, position, shape, and motion" means either one of size, position, shape and motion, or more than one of size, position, shape, and motion. The term, "position" means the point or area in space actually occupied by the occupying item relative to the vehicular component. A detected physical characteristic of an occupying item, such as height of the passenger, is not the position because the position is a characteristic of the occupying item's relation to its environment. The '595 patent, col. 7, lines 62-66; col. 15, lines 30-45; col. 10, lines 62-65; Prosecution history of 09/448,337, p. 9, ATI's Amendment filed on Nov. 21, 2000; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004).
[7] **control means for controlling the vehicular component** based on the analysis of the information or	ATI: ***control means for controlling***	Structure that controls. This is a means-plus-function limitation subject	[7] The "control means" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶ 6. The function of the control means is to control the vehicular

data about the occupying item with respect to the at least one characteristic by said pattern recognition system.	HONDA ET AL.: [7] **control means for controlling the vehicular component**	to 35 U.S.C. § 112(6). The function is controlling the vehicular component based on the analysis of the information or data about the occupying item. Structure to perform the function includes that described in the patent specification and equivalents, such as a microprocessor or a processor means. Col. 9, line 47 – col. 10, line 2; col. 17, lines 28-37; fig. 7.	component based on the analysis of the information or data about the occupying item. The structure for performing this function is the processor used for the pattern recognition adopting a trained neural network. The '595 patent, col. 9, line 47- col. 10, line 10; Fig. 7 and col. 17, lines 32-37; col. 22, lines 55-67; Prosecution history of 08/239,978, p. 1, Response to Restriction dated Mar. 13, 1995.
25. The vehicle of claim 24,			
wherein said control means are [8] **arranged to enable suppression of deployment of the airbag**.	[8] **arranged to enable suppression of deployment of the airbag**.		[8] The limitation, "arranged to enable suppression of deployment of the airbag" means prevent deployment of the airbag. The '595 patent, col. 15, lines 42-45.

CLAIM 26 OF THE '595 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
26. A vehicle including an arrangement for controlling a vehicular component, the arrangement comprising:			

[9] **means for obtaining information or data about the position of an occupying item of a seat**,	[9] **means for obtaining information or data about the position of an occupying item of a seat**,		[9] The limitation, "means for obtaining information or data" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶ 6. The function of the means for obtaining is to obtain information or data about an occupying item of a seat. The structure for performing this function is transducers that receive acoustic waves (ultrasound) or electromagnetic waves (beam-emitting) modified by the occupying item of the seat. The '595 patent, col. 8, lines 7-12, col. 16, lines 30-37 and col. 18, line 46-col. 19, line 30; The '595 patent, col. 5, line 42- col. 6, line 5; col. 24, lines 25-26; Denial of Interference for 08/905,877 (U.S. Pat. No. 6,186,537)(B.P.A.I. Jun. 7, 2000).
[10] **a pattern recognition system** for [11] **receiving the information or data about the position of the occupying item** and [12] **analyzing the information or data about the position of the occupying item**, and	[10] **a pattern recognition system** [11] **receiving the information or data about the position of the occupying item** [12] **analyzing the information or data about the position of the occupying item**		[10] The "pattern recognition system" means a processor employing an artificial neural network which differentiates between the occupying item (his or her head and chest) and his extremities (hands and arms) and differentiates an occupying item from an inanimate object. The '595 patent, Col. 6, lines 24-32. [11] The limitation, "receiving the information or data about the position of the occupying item" means receiving patterns of reflected waves that indicate the position of the occupying item. The term, "position" means the point or area in space actually

			occupied by the occupying item relative to the vehicular component A detected physical characteristic of an occupying item, such as height of the passenger, is not the position because the position is a characteristic of the occupying item's relation to its environment. The '595 patent, col. 10, lines 62-65; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004); Prosecution history of 09/448,357, p. 9, ATI's Amendment filed on Nov. 21, 2000. [12] The limitation, "analyzing the information or data about the position of the occupying item" means determining the changes in patterns of reflected waves that indicate the position, which affects the proximity of the occupying item relative to the vehicular component. The '595 patent, col. 7, lines 62-66; col. 15, lines 30-45
[13] **control means for controlling the vehicular component** based on the analysis of the information or data about the position of the occupying item by said pattern recognition system.	[13] **control means for controlling the vehicular component**		[13] The limitation, "control means" is a means plus function limitation and should be construed under 35 U.S.C. § 112, ¶ 6. The function of the control means is to control the vehicular component based on the analysis of the information or data about the occupying item. The structure for performing this function is the processor used for the pattern recognition adopting the trained neural network.

			The '595 patent, col. 9, lines 47; Fig. 7; col. 17, lines 32-37- col. 10, line 10.

CLAIMS 35 and 41 OF THE '595 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
35. [14] **A method for controlling a vehicular component**, comprising [15] **the steps of**	[14] **A method for controlling a vehicular component** [15] **the steps of**		[14] The phrase, "a vehicular component" means a component which would have a variable operation depending on the position of the occupying item, e.g., an airbag. The '595 patent, col. 24, lines 27-31 [15] The phrase, "the steps of" means a combination of the steps.
[16] **obtaining information or data** about [17] **an occupying item of a seat** of the vehicle,	[16] **obtaining information or data** [17] **an occupying item of a seat**		[16] The limitation, "obtaining information or data" is a step plus function limitation and should be construed under 35 U.S.C. § 112 ¶ 6. This limitation recites the underlying function, i.e., "what this limitation ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish." There is no indication of how to accomplish the function. *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002); *Cummins-Allison Corp. v. Glory Ltd.*, 2003 WL 355470 (N.D. Ill. Feb. 12, 2003). The function is to obtain information or data about an occupying item of a seat. The act

			for performing this function is transmitting and receiving acoustic waves or electromagnetic waves which are modified by a part of the occupying item and the structure for performing this function are transducers that receive acoustic waves (ultrasound) or electromagnetic waves (beam-emitting) modified by the occupying item of the seat The '595 patent, Col. 11, lines 1-15 and Col. 18, lines 46-62; Denial of Interference for 08/905,877 (U.S. Pat. No. 6,186,537)(B.P.A.I. Jun. 7, 2000). [17] The limitation, "an occupying item of a seat" means an object that occupies a seated area, such as a human occupant or a bag of groceries. The '595 patent, Col. 6, lines 29-30
[18] **providing the information or data** about the occupying item to [19] **a pattern recognition system**,	[18] **providing the information or data** [19] **a pattern recognition system**,		[18] The limitation, "providing the information or data" is a step plus function limitation and should be construed under 35 U.S.C. § 112 ¶ 6. This limitation recites the underlying function, i.e., "what this limitation ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish." There is no indication of how to accomplish the function. *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002); *Cummins-Allison Corp. v. Glory Ltd.*, 2003 WL 355470 (N.D. Ill. Feb. 12, 2003); Denial of Interference for 08/905,877

			(U.S. Pat. No. 6,186,537)(B.P.A.I. Jun. 7, 2000). The function is to provide the information or data. The act for performing this function is sending signals from the transducer to the pattern recognition system by means of cable wire. The '595 patent, Fig. 2 and col. 15, lines 25-45 [19] The limitation, "a pattern recognition system" means artificial neural network which differentiates between the occupant (his or her head and chest) and his extremities (hands and arms) and differentiates an occupant from an inanimate object. The '595 patent, col. 6, lines 24-32
[20] **analyzing the information or data** about the occupying item with respect to at least one characteristic selected from a group consisting of size, position, shape and motion in the pattern recognition system, and	[20] **analyzing the information or data**		[20] The limitation, "analyzing the information or data" is a step plus function limitation and should be construed under 35 U.S.C. § 112 ¶ 6. This limitation recites the underlying function, i.e., "what this limitation ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish." There is no indication of how to accomplish the function. *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002); *Cummins-Allison Corp. v. Glory Ltd.*, 2003 WL 355470 (N.D. Ill. Feb. 12, 2003).

			The function is to analyze the information or data. The act for performing this function is to determine changes in patterns of reflected waves that indicate size, position, shape and/or motion, which affects the proximity of the occupying item relative to the vehicular component using a processor employing a pattern recognition system which adopts an artificial neural network. The '595 patent, col. 15, lines 30-45; Prosecution history of 08/640,068, Declaration under 37 C.F.R. 1.131 dated March 10, 1997.
[21] **controlling the vehicular component** based on the analysis of the information or data about the occupying item with respect to the at least one characteristic by the pattern recognition system.	[21] **controlling the vehicular component**		[21] The limitation, "controlling the vehicular component" is a step plus function limitation and should be construed under 35 U.S.C. § 112 ¶ 6. This limitation recites the underlying function, i.e., "what this limitation ultimately accomplishes in relationship to what the other elements of the claim and the claim as a whole accomplish." There is no indication of how to accomplish the function. *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002); *Cummins-Allison Corp. v. Glory Ltd.*, 2003 WL 355470 (N.D. Ill. Feb. 12, 2003). The function is to control the vehicular component. The act for performing the function is to prevent and modify deployment of the vehicular component using the processor used for the pattern

			recognition adopting the trained neural network. The '595 patent, col. 15, lines 41-45.
41. The method of claim 40,			
wherein the step of controlling the airbag comprises [22] **the step of enabling suppression of deployment of the airbag**.	[22] **the step of enabling suppression of deployment of the airbag**.		[22] The limitation, "the steps of enabling suppression of deployment of the airbag" means preventing deployment of the airbag. The '595 patent, Col. 15, lines 42-45.

6. U.S. PATENT NO. 6,484,080

CLAIMS 1-2 ,4, 6-8, 10-11 AND 15 OF THE '080 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. In a motor vehicle, [1]**a control system for controlling at least one part of the vehicle** comprising:	[1]**a control system for controlling at least one part of the vehicle**		[1] An assemblage of inter-related elements designed to control operation of at least one part of a motor vehicle.
a [2]**plurality of sensor systems** [3]**mounted at different locations** [4]**on the vehicle**, each of said sensor systems providing a [5]**measurement related to a state of said sensor system** or a [6]**measurement related to a state of the mounting location**; and	[2]**plurality of sensor systems** [3]**mounted at different locations** [4]**on the vehicle**, [5]**measurement related to a state of said sensor system** [6]**measurement related to a state of the mounting location**;		[2] More than one sensor system. (col. 19, lines 32-33) [3] "mounted at different locations" means each of the multiple sensor systems is affixed to a different part of the vehicle. (Figure 7; col. 22, line 54 – col. 23, line 9). [4] "on the vehicle" means in contact with the vehicle. (Figure 7; col. 22, line 54 – col. 23, line 9). [5] measurement of the acceleration, angular acceleration, angular velocity, angular orientation, velocity, or temperature of the sensor system, or the state of the mounting location. (col. 7, lines 45-47; col. 23, lines 10-12) [6] The phrase "measurement related to a state of the mounting location" is vague and ambiguous. The specification does not distinguish between the "state of the sensor system" from "state of the mounting

			location."
[7]**a processor coupled to** said sensor systems and [8]**arranged to diagnose the state of the vehicle** [9]**based on the measurements of said sensor systems**,	[7]**a processor coupled to** [8]**arranged to diagnose the state of the vehicle** [9]**based on the measurements of said sensor systems**,		[7] a microprocessor, microcontroller, neural processor, or DSP. (col. 15, lines 29-37) [8] "arranged to diagnose the state of the vehicle" means that the processor diagnoses the state of the vehicle by employing a trained pattern recognition algorithm generated by a trained neural network. (col. 12, lines 50-53; col. 14, lines 26-30; col. 15, lines 27-41; col. 16, lines 2-8; col. 16, lines 14-16); (Prosecution History of the '080 patent, Paper #11, Notice of Allowability, p. 2) The phrase "state of the vehicle" means condition of the vehicle with respect to stability and proper running and operating condition. (col. 9, lines 35-38) [9] Based on the measurements of the state of the sensor systems. (col. 6, lines 48-52; col. 19, line 31)
[10]**said processor being arranged to control the at least one part based at least in part on the diagnosed state of the vehicle**.	[10]**said processor being arranged to control the at least one part based at least in part on the diagnosed state of the vehicle**.		[10] The processor generates a control signal to control at least one part of the vehicle based upon the diagnosed state of the vehicle. The control signal is generated from a trained pattern recognition algorithm. (col. 7, line 57 – col. 8, line 1); (Prosecution History of the '080 patent, Paper #11, Notice of Allowability, p. 2) The processor that controls the at least one part of the vehicle is the same processor that

			diagnoses the state of the vehicle. (col. 6, line 66 – col. 7, line 6)
2. The vehicle of claim 1, wherein at least one of said sensor systems is a sensor [11]**selected from a group consisting of** a [12]**single axis acceleration sensor**, a [13]**double axis acceleration sensor**, a [14]**triaxial acceleration sensor** and a[15]**gyroscope**.	[11]**selected from a group consisting of** [12]**single axis acceleration sensor**, [13]**double axis acceleration sensor**, [14]**triaxial acceleration sensor** [15]**gyroscope**.		[11] "Selected from a group consisting of A, B, C, and D" means A, B, C, or D. [12] A single axis acceleration sensor is a sensor that measures acceleration along one axis. [13] A double axis acceleration sensor is a sensor that measures acceleration along two axes. [14] A triaxial acceleration sensor is a sensor that measures acceleration along three axes. [15] A gyroscope is an instrument that measures orientation.
4. The vehicle of claim 1, wherein the state of the vehicle diagnosed by said processor includes [16]**angular motion of the vehicle.**	[16]**angular motion of the vehicle.**		[16] A quantity of movement of the vehicle which indicates rotation about one or more axes. (col. 23, lines 48-51)
6. The vehicle of claim 1, wherein the at least one part is an [17]**occupant restraint device**, [18]**said processor**	[17]**occupant restraint device**,		[17] An occupant restraint device is any type of device that is deployable in the event of a crash involving the vehicle for the purpose of protecting an occupant from the effects of the crash and/or minimizing the potential injury to the occupant. (col. 9, lines 49-52)

being arranged to control the occupant restraint device [19]**in an attempt to minimize injury to an occupant**.	[18]**said processor being arranged to control the occupant restraint device** [19]**in an attempt to minimize injury to an occupant**.		[18] The processor that controls the occupant restraint device is the same processor that diagnoses the state of the vehicle based on the measurements of the sensor systems. (col. 6, line 66 – col. 7, line 6) [19] The phrase "in an attempt to minimize injury to an occupant" is vague and ambiguous and not subject to construction.
7. The vehicle of claim 1, wherein the state of the vehicle diagnosed by said processor includes a [20]**determination of a location of an impact between the vehicle and another object.**	[20]**determination of a location of an impact between the vehicle and another object.**		[20] Identifying the location on the vehicle of an impact between the vehicle and another object. (col. 13, lines 23-31)
8. The vehicle of claim 7, wherein the at least one part is an occupant restraint device, said [21]**processor being arranged to** [22]**forecast the severity of the impact using the force/crush**	[21]**processor being arranged to** [22]**forecast the severity of the impact using the force/crush properties of the vehicle at the impact location**		[21] Employing an algorithm generated by a trained neural network. [22] The processor includes a specifically tailored algorithm for forecasting the severity of the impact based upon the combination of the force experienced by the vehicle at the location of the impact and the crush properties of the vehicle at the location of the

properties of the vehicle at the impact location and [23]**control the occupant restraint device based at least in part on the severity of the impact**.	[23]**control the occupant restraint device based at least in part on the severity of the impact**.		impact. (col. 13, lines 32-35 [23] The same processor that forecasts the severity of the impact also controls the occupant restraint device based at least in part on the forecasted severity of the impact. (col. 7, lines 9-13
10. The vehicle of claim 9, further comprising, a [24]**weight sensing system** [25]**coupled to a seat in the vehicle for sensing the weight of an occupying item of the seat**, said [26]**weight sensing system being coupled to said processor** and said [27]**processor controlling the occupant restraint device based on the state of the vehicle and the weight of the occupying item of the seat sensed by said weight sensing system**.	[24]**weight sensing system** [25]**coupled to a seat in the vehicle for sensing the weight of an occupying item of the seat**, [26]**weight sensing system being coupled to said processor** [27]**processor**		[24] The phrase "weight sensing system coupled to a seat in the vehicle for sensing the weight of an occupying item of the seat" is vague and ambiguous and not capable of construction. If a construction must be given, these limitations require that the weight sensing system is directly connected to the vehicle seat containing the occupying item and calculates the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity. (col. 9, lines 1-11) [25] Directly connected to the vehicle seat containing the occupying item. [26] If a construction is given to "weight sensing system," The weight sensing system is in direct communication with the

	controlling the occupant restraint device based on the state of the vehicle and the weight of the occupying item of the seat sensed by said weight sensing system.		processor. (col. 7, lines 16-17 [27] The processor that controls the occupant restraint device is the same processor that diagnoses the state of the vehicle and determines the weight of the occupying item on the seat. This processor controls the occupant restraint device based on both the diagnosed state of the vehicle and the weight of the occupying item using a trained pattern recognition algorithm. (col. 6, line 66 – col. 7, line 21)
11. The vehicle of claim 1, wherein said processor includes [28]**pattern recognition means for diagnosing the state of the vehicle**.	ATI and HONDA ET AL: [28]***pattern recognition means for diagnosing the state of the vehicle***.	Structure to diagnose the state of the vehicle. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is diagnosing the state of the vehicle. Structure to perform the function includes that described in the patent specification and equivalents, such as neural networks, neural network systems, modular neural networks, artificial neural networks. Col. 7 line 63 - col. 8 line 4; col. 8, lines 13-35; col. 14 line 31 – col. 17 line 61; col. 25, lines 15-20; col. 26, lines 5-7; fig. 2.	[28] Pattern recognition means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: diagnosing the state of the vehicle. Structure: A processor employing a trained algorithm generated by a trained pattern recognition algorithm, a neural network, modular neural network or other pattern recognition systems. (col. 12, lines 50-53; col. 14, lines 26-30; col. 15, lines 29-37; col. 16, lines 2-8; col. 16, lines 14-16; col. 26, lines 5-7); (Prosecution History of the '080 patent, Paper #11, Notice of Allowability, p. 2)
15. The vehicle of claim 1, wherein the state of the vehicle includes angular	[29]**said processor determines the angular acceleration of the**		[29] The same processor recited in claim 1 also determines the angular acceleration of the vehicle based on the acceleration measured by accelerometers. (col. 6, lines 66-

acceleration, a plurality of said sensor systems comprising accelerometers such that [29]**said processor determines the angular acceleration of the vehicle based on the acceleration measured by said accelerometers**.	**vehicle based on the acceleration measured by said accelerometers**.		67) Angular acceleration is a quantity of movement of the vehicle which indicates acceleration about one or more axes. (col. 23, lines 48-51)

CLAIMS 19-20, 22, 24-25, AND 27 OF THE '080 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
19. A method for controlling at least one part of the vehicle comprising the steps of:			
mounting a plurality of sensor systems at different locations on the vehicle;			
measuring a state of the sensor system or a state of the respective mounting location of the sensor system;			
[30]**diagnosing the state of the vehicle** based on the measurements of the state of the sensor	[30]**diagnosing the state of the vehicle**		[30] Inputting the measurements related to the state of the sensor system or the measurements related to the state of the mounting locations of the sensor systems into a processor employing a trained pattern

systems or the state of the mounting locations of the sensor systems, and			recognition algorithm for diagnosing the state of the vehicle, where the trained pattern recognition algorithm is generated by a trained neural network. (col. 12, lines 50-53; col. 14, lines 26-30; col. 15, lines 27-41; col. 16, lines 2-8; col. 16, lines 14-16); (Prosecution History of the '080 patent, Paper #11, Notice of Allowability, p. 2)
controlling the at least one part based at least in part on the diagnosed state of the vehicle.			
20. The method of claim 19, wherein the state of the sensor system is the [31]**acceleration**, [32]**angular acceleration**, [33]**angular velocity or** [34]**angular orientation** of the sensor system.	[31]**acceleration**, [32]**angular acceleration**, [33]**angular velocity** or [34]**angular orientation**		[31] rate of change in velocity of the sensor system over time. [32] The term "angular acceleration of the sensor system" means rate of change in angular velocity of the sensor system over time. (col. 23, lines 48-51) [33] The term "angular velocity of the sensor system" means rate of change in angular displacement of the sensor system over time. [34] The term "angular orientation of the sensor system" means the position of the sensor system relative to two or more axes.
22. The method of claim 19, wherein the step of diagnosing the state of the vehicle comprises the step of determining whether	[35]**stable** [36]**about to** [37]**rollover**		[35] The term "stable" means the vehicle is not experiencing excessive angular acceleration, velocity, or inclination. (col. 7, line 50; col. 9, lines 41-43) [36] The term "about to" means on the verge

the vehicle is [35]**stable** or is [36]**about to** [37]**rollover** or [38]**skid**.	[38]**skid**.		of occurring, but not currently occurring. [37] The term "rollover" means experiencing excessive angular inclination. (col. 9, lines 41-43) [38] The term skid means slide. (col. 6, lines 24-28)
24. The method of claim 19, wherein the at least one part is an occupant restraint device, the step of controlling the at least one part comprising [39]**the steps of controlling the system in an attempt to minimize injury to an occupant in the event of a crash**.	[39]**the steps of controlling the system in an attempt to minimize injury to an occupant in the event of a crash**.		[39] Deploying an occupant restraint device. (col. 7, lines 3-6) The phrase "in an attempt to minimize injury to an occupant" is vague and ambiguous and not subject to construction.
25. The method of claim 19, wherein the step of diagnosing the state of the vehicle comprises [40]**the step of determining a location of an impact between the vehicle and another object**.	[40]**the step of determining a location of an impact between the vehicle and another object**.		[40] Measuring vibrations and locating the source of the vibrations based on time of flight and/or triangulation. (col. 13, lines 23-31)
27. The method of claim 19, wherein the at least one part is an	[41]**the step of controlling the occupant restraint**		[41] generating a control signal based on the weight of the occupying item and transmitting the control signal to the occupant restraint

occupant restraint device, further comprising the step of sensing the weight of an occupying item of a seat of the vehicle, the step of controlling the at least one part comprising [41]**the step of controlling the occupant restraint device based at least in part on the weight of the occupying item of the scat**[sic].	**device based at least in part on the weight of the occupying item of the scat**[sic].		device. (col. 7, lines 16-21)

CLAIMS 33, 35-36, 38-41, AND 44 OF THE '080 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
33. In a motor vehicle, a control system for controlling at least one part of the vehicle comprising:			
a plurality of sensor systems mounted on the vehicle, each of said sensor systems providing a measurement of a state of said sensor system or a state of the mounting location of	[42]**generating a signal representative of the measurement**; and		[42] The term "signal" means a time varying electrical signal generated by the sensor system. The term "representative" is vague and ambiguous.

said sensor system and [42]**generating a signal representative of the measurement**; and			
[43]**a pattern recognition system for receiving the signals from said sensor systems and diagnosing the state of the vehicle based on the measurements of said sensor systems**, said pattern recognition system being arranged to [44]**generate a control signal** for controlling the at least one part based at least in part on the diagnosed state of the vehicle.	[43]**a pattern recognition system for receiving the signals from said sensor systems and diagnosing the state of the vehicle based on the measurements of said sensor systems**, [44]**generate a control signal**		[43] One or more trained neural networks that receive the signals from the sensor system and diagnose the state of the vehicle based on the measurements of the sensor systems. (col. 8, lines 13-16; col. 12, lines 50-53; col. 14, lines 26-30; col. 15, lines 29-37; col. 16, lines 2-8; col. 16, lines 14-16; col. 26, lines 5-7); (Prosecution History of the '080 patent, Paper #11, Notice of Allowability, p. 2) [44] The pattern recognition system generates a control signal that controls at least one part of the vehicle based on the diagnosed state of the vehicle.
44. The vehicle of claim 33, wherein the state of the vehicle diagnosed by said pattern recognition system includes a [45]**state of an abnormally operating component**, said pattern recognition system [46]**being**	[45]**state of an abnormally operating component**, [46]**being arranged to identify a** [47]**potentially**		[45] The term "state of" means "condition of". (col. 1, line 19) The term "abnormally operating" is vague and ambiguous. [46] Trained to identify. (col. 8, lines 13-16; col. 12, lines 50-53; col. 14, lines 26-30; col. 15, lines 29-37; col. 16, lines 2-8; col. 16, lines 14-16; col. 26, lines 5-7)

arranged to identify a [47]**potentially malfunctioning component** [48]**based on the state of the component** measured by said sensor systems and [49]**determine whether the identified component is operating abnormally** based on the state of the component measured by said sensor systems.	**malfunctioning component** [48]**based on the state of the component** [49]**determine whether the identified component is operating abnormally**		[47] The term "potentially malfunctioning component" is vague and ambiguous. [48] Based on the condition of the component. (col. 1, line 19) [49] The term "operating abnormally" is vague and ambiguous.

CLAIM 48 OF THE '080 PATENT	***Disputed Terms***		**Defendants' Proposed Claim Construction**
48. A method for controlling at least one part of the vehicle, comprising the steps of:			
mounting a plurality of sensor systems on the vehicle;			
measuring a state of the sensor system or a state of the respective mounting location of the sensor system;			
generating signals representative of the measurements of the sensor systems;			

[50]**inputting the signals into a pattern recognition system** to obtain a diagnosis of the state of the vehicle; and	[50]**inputting the signals into a pattern recognition system**		[50] Entering the generating signals into the input nodes of one or more neural networks trained to diagnose the state of the vehicle. (col. 16, lines 27-31; col. 17, lines 3-4)
controlling the at least one part based at least in part on the diagnosis of the state of the vehicle.			

CLAIMS 60-62 OF THE '080 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
60. In a motor vehicle having a seat, a control system for controlling at least one part of the vehicle based on [51]**occupancy of the seat**, comprising:	[51]**occupancy of the seat**,		[51] The occupancy of the seat involves differentiating between animate and inanimate objects as well as determining where in the seat the occupant is sitting. (col. 24, lines 39-42)
[52]**a plurality of strain gages** [53]**mounted in connection with the seat**, each of said strain gages[54] **measuring strain of a respective mounting location caused by occupancy of the seat**, and	[52]**a plurality of strain gages** [53]**mounted in connection with the seat**, [54] **measuring strain of a respective mounting location caused by**		[52] More than one device that measures deformation or strain of a support structure. (Prosecution history of U.S. Pat. No. 6,242,701, patent that was incorporated by reference, Paper #11, Amendment dated Aug. 15, 2000, p. 11) [53]The strain gages are in the vehicle seat, or in or on a support structure of the seat. (col. 24, lines 37-38) [54] Each strain gage measures the strain of the respective mounting location caused by the force generated by the occupying item on

	occupancy of the seat,		the seat. (col. 9, lines 2-4)
[55]**a processor coupled to said strain gages** and [56]**arranged to determine the weight of an occupying item** [57]**based on the strain measurements from said strain gages over a period of time**,	[55]**a processor coupled to said strain gages** [56]**arranged to determine the weight of an occupying item** [57]**based on the strain measurements from said strain gages over a period of time**,		[55] A processor in direct communication with the strain gages. (col. 24, lines 63-67); (U.S. Patent No. 6,242,701, incorporated by reference, col. 34, lines 7-19) [56] The processor is trained (e.g., with a trained neural network) to determine the weight of the occupying item (see claim 10). [57] Based on the strain measurements from the strain gages over a period of time (i.e., dynamic measurements). (col. 6, line 66 – col. 7, line 21; col. 9, lines 1-8)
said processor being [58]**arranged to control the at least one part based at least in part on the determined weight of the occupying item of the seat.**	[58]**arranged to control the at least one part based at least in part on the determined weight of the occupying item of the seat.**		[58] The same processor mentioned above controls the at least one part based at least in part on the determined weight of the occupying item in the seat. (col. 7, lines 16-21)
61. The vehicle of claim 60, wherein said processor is [59]**arranged to determine motion of**	[59]**arranged to determine motion of the occupying item of the seat based on the**		[59] The processor mentioned above determines the motion of the occupying item of the seat based on the strain gage measurements from the strain gages over the period of time using an algorithm generated

the occupying item of the seat based on the strain measurements from said strain gages over the period of time.	**strain measurements from said strain gages over the period of time**.		by a trained neural network. (col. 9, lines 8-11)
62. The vehicle of claim 60, further comprising [60]**at least one accelerometer mounted on the vehicle for measuring acceleration**, said [61]**processor being arranged to control the at least one part based at least in part on the determined weight of the occupying item of the seat and the acceleration measured by said at least one accelerometer**.	[60]**at least one accelerometer mounted on the vehicle for measuring acceleration**, [61]**processor being arranged to control the at least one part based at least in part on the determined weight of the occupying item of the seat and the acceleration measured by said at least one accelerometer**.		[60] More than one accelerometer mounted on the vehicle for measuring the vehicle acceleration. (col. 24, lines 35-67) [61] The processor that determines the weight of an occupying item is arranged to control the at least one part based at least on the determined weight of the occupying item of the seat and the acceleration of the vehicle as measured by the at least one accelerometer. (col. 9, lines 1-16)

7. U.S. PATENT NO. 6,712,387

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. An arrangement for controlling deployment of a [1] **side airbag** from an [2] **airbag module** to protect an occupant in a seat of a vehicle in a crash, comprising	[1] **side airbag** [2] **airbag module**		The preamble of claim 1 is limiting because deployment of a side airbag relates to patentability of claim 1. pp. 4-6, ATI's Amendment filed on Nov. 6, 2000. [1] The limitation, "side airbag" means an airbag for use in a lateral crash of a vehicle and located at a side of a vehicle *see* U.S. Pat. No. 6,325,414 ("the '414 patent), Fig. 9, numeral 336: [The prosecution history of the '414 patent is relevant to an understanding of the scope of a common term in the '387 patent, which is stemming from the parent application but is issued later than the '414 patent. *Microsoft Corp. v. Multi-Tech Systems, Inc.*, 357 F.3d 1340 (Fed. Cir. 2004), *cert.* denied, 125 S. Ct. 61 (2004) (citing *E.g.*, *Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990); *see also Laitram Corp. v. Morehouse Indus., Inc.*, 143 F.3d 1456, 1460 n.2 (Fed. Cir. 1998).] [2] The limitation, "an airbag module" means a container that houses an un-inflated airbag. *see* the '414 Patent, Fig. 9, item 332 and col. 1, lines 31-33
[3] **determining means for determining the position of at least a part of the occupant**, and	[3] **determining means for determining the position of at least a part of the occupant**,		[3] The phrase, "determining means" is not a means plus function element because it is modified by structure for performing the recited function. The phrase, "determining the position" means "determining the point or area in space actually occupying by the head and/or chest of the occupant relative to the air bag module.

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			Determining a physical characteristic of the occupant such as determining the height is not determining the position because determining the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 1-4; col. 16, lines 54-57; Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004).
[4] **a control circuit** [5] **coupled to** said determining means for [6] **controlling deployment of the side airbag** based on the [7] **determined position** of the [8] **at least a part of the occupant**,	[4] **a control circuit** [5] **coupled to** [6] **controlling deployment of the side airbag** [7] **determined position** [8] **at least a part of the occupant**,		[4] The term, "control circuit" means a part of the processor that controls deployment of the side airbag with a pattern recognition algorithm adopting an artificial neural network. Fig. 9, item 101B and col. 1 lines 38-29 of the '414 Patent. [5] The limitation, "coupled to" means "resident in" the processor as a part of the processor. *see* Prosecution history of the '387 patent, p. 4, ATI's Amendment dated May 7, 2001 of the '414 Patent; *see* Fig. 9, and col. 1, lines 38-39 of the '414 patent. [6] The limitation, "controlling deployment" means determining whether to deploy or not. Col. 6, lines 1-4 and col. 16, lines 51-57. [7] The phrase, "determined position" means "the determined point or area in space actually occupying by the head and/or chest of the occupant relative to the air bag module. A determined physical characteristic of the occupant such as the height is not the position because the determined position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 1-4; col. 16, lines 54-57; Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000; *Automotive Technologies*

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			International, Inc. v. Delphi Corp. No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004). [8] The limitation, "at least a part of the occupant" means a body part of the occupant, i.e., a head and/or chest. e.g., col. 2, lines 59-67; Prosecution history of 08/040,978, pp. 1-2, ATI's Response to Restriction dated Feb. 9, 1994.
said determining means comprising [9] **at least one** [10] **receiver** [11] **adapted to receive** [12] **waves** from [13] **a space above a seat portion** of the seat and	[9] **at least one** [10] **receiver** [11] **adapted to receive** [12] **waves** [13] **a space above a seat portion**		[9] The limitation, "at least one" means only one or more than one. *Rhine v. Casio, Inc.*, 183 F.3d 1342 (Fed. Cir. 1999). [10] The term, "receiver" means a dedicated receiver that only receives reflected waves or a transducer that receives reflected waves. A receiver or a transducer that does not receive electromagnetic waves, e.g., an ultrasonic receiver, or their equivalents, is excluded. col. 16, line 51- col. 17, line 3; Denial of Interference for 08/905,877 (matured to U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000). [11] The phrase, "adapted to receive" is a limitation because it is material to patentability. This phrase requires a receiver to be placed in a door of the vehicle. Prosecution history of the '387 patent, pp. 4-6, ATI's Amendment filed on Nov. 6, 2000. [12] The term, "waves" means propagating signals that have a direction of propagation, velocity of propagation, and a wavelength which depend on the property of materials in which the waves exist and the type of waves (e.g., acoustic, mechanical, electromagnetic). Figs. 1-6 and col. 11, lines 29-65; Denial of Interference for 08/905,877

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			(matured to U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000). [13] The limitation, "a space above a seat portion" means a space higher than a seat portion where a passenger places their buttocks as opposed to the back portion which supports the passenger's back. *see* Figs. 1-19; Merriam-Webster's Collegiate Dictionary, 11 ed. p. 4 (2003).
a [14] **processor** coupled to said at least one receiver for [15] **generating a signal representative of the position** of the [16] **at least a part of the occupant** based on the waves received by said at least one receiver,	[14] **processor** [15] **generating a signal representative of the position** [16] **at least a part of the occupant**		[14] The term, "processor" means a device programmed with a pattern recognition algorithm employing artificial neural network. *see* e.g. col. 11, line 61-col. 12, line 64. [15] The limitation, "generating a signal representative of the position" means generating a signal that represents the point or area in space actually occupying by the head and/or chest of the occupant relative to the side air bag module. A signal that represents a physical characteristic of the occupant such as the height is not the position because the position is a characteristic of the occupant's relation to his or her environment. col. 6, lines 1-4; col. 16, lines 54-57; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004); Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000. [16] The limitation, "at least a part of the occupant" means a body part of the occupant, i.e., a head and/or chest. e.g., col. 2, lines 59-67; Prosecution history of 08/040,978, pp. 1-2, ATI's Response to Restriction dated Feb. 9, 1994.

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
said at least one receiver [17] **being capable of receiving** [18] **electromagnetic waves**.	[17] **being capable of receiving** [18] **electromagnetic waves**.		[17] The limitation, "being capable of receiving" means receiving. Merriam-Webster's Collegiate Dictionary, 11 ed. p. 182 (2003). [18] The limitation, "electromagnetic waves" means a subset of the waves defined in the above term [12]. Figs. 1-6 and col. 3, lines 52-58; Interference Decision for 08/905,877 (U.S. Pat. No. 6,186,537) (B.P.A.I. Jun. 7, 2000).
2. The arrangement of claim 1,			
wherein said determining means further comprise [19] **a transmitter** [20] **adapted to transmit** waves into the space above the seat portion of the seat, said at least one receiver [21] **being arranged to receive** the waves [22] **transmitted by** said transmitter.	ATI: ***transmit waves*** HONDA ET AL.: [19] **a transmitter** [20] **adapted to transmit** [21] **being arranged to receive** [22] **transmitted by**	Emit electromagnetic, ultrasonic, acoustic, or optical energy. Col. 11, lines 33-42; col. 14, lines 44-47; col. 15, lines 1-17; figs. 1, 4.	[19] The term, "transmitter" means a dedicated transmitter that only transmits propagating signals or a transducer that transmits propagating signals. col. 16, line 65- col. 17, line 3 [20] The phrase, "adapted to transmit" is a limitation because it is material to the patentability. This phrase requires a transmitter to transmit waves. Col. 11, lines 38-40; prosecution history of the '387 patent, pp. 4-6, ATI's Amendment filed on Nov. 6, 2000. [21] The phrase, "being arranged to receive" means placed in a door of the vehicle to receive propagating signals. Prosecution history of the '387 patent, p. 6, ATI's Amendment filed on Nov. 6, 2000 and e.g., col. 11, lines 49-52.

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			[22] The limitation, "transmitted by" means that the transmitter transmits propagating signals. col. 11, lines 38-40.
3. The arrangement of claim 2,			
wherein said at least one receiver is [23] **structured and arranged** to [24] **convert received waves into electrical signals**.	[23] **structured and arranged** [24] **convert received waves into electrical signals**.		[23] The limitation, "structured and arranged" means the receiver directly coupled to the processor (see [14] above) and having the structure of. col. 11, lines 56-57. [24] The limitation, "convert received reflected waves into electrical signals" means to digitize the amplitude of the received reflected waves. col. 11, lines 61-64.
6. The arrangement of claim 1,			
wherein said control circuit control deployment of the side airbag by [25] **suppressing deployment of the side airbag**, [26] **controlling a time at which deployment of the side airbag starts**, [27] **controlling a rate of gas flow into the side airbag**, [28] **controlling a rate of gas flow out of the side**	[25] **suppressing deployment of the side airbag** [26] **controlling a time at which deployment of the side airbag starts** [27] **controlling a rate of gas flow**		[25] The limitation, "suppressing deployment" means preventing deployment. col. 16, lines 54-57; col. 5, lines 53-57. [26] The limitation, "controlling a time at which deployment of the side airbag starts" means control when to start deployment of the side airbag. *See* col. 5, lines 53-57 and col. 16, lines 54-57. [27] The limitation, "controlling a rate of gas flow into the

CLAIMS 1, 2, 3 and 6 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
airbag [29] **or** [30] **controlling a rate of deployment of the side airbag**.	**into the side airbag** [28] **controlling a rate of gas flow out of the side airbag** [29] **or** [30] **controlling a rate of deployment of the side airbag**.		side airbag" means controlling the volume rate of gas flowing into the side airbag. col. 5, lines 53-57. [28] The limitation, "controlling a rate of gas flow out of the side airbag" means controlling the volume rate of gas flowing out of the side airbag. col. 5, lines 53-57. [29] The phrase, A, B, C, D, "or" E means only one of A, B, C, D and E. *Kustom Signals,Inc. v. Applied Concepts, Inc.*, 264 F.3d 1326 (Fed. Cir. 2001). [30] The limitation, "controlling a rate of deployment of the side airbag" means controlling the volume rate and the amount of gas flowing into the side airbag. col. 5, lines 53-57.

CLAIM 20 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
20. The method of claim 16,			
wherein the step of receiving waves comprises the step of [31] **arranging a receiver capable of receiving electromagnetic waves in the vehicle in a position to receive electromagnetic waves from the space above the seat portion of the seat**.	[31] **arranging a receiver capable of receiving electromagnetic waves in the vehicle in a position to receive electromagnetic waves from the space above the seat portion of the seat**.		[31] This limitation means placing a receiver that receives electromagnetic waves in a door of the vehicle. Prosecution history of the '387 patent, p. 6, ATI's Amendment filed on Nov. 6, 2000.

CLAIM 20 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT

CLAIM 38 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
38. A method for controlling deployment of a side airbag from an airbag module to protect an occupant in a seat of a vehicle in a crash, comprising the steps of:			
determining whether an occupant is present in the seat, and			
controlling deployment of the side airbag based on the [32] **presence or absence of an occupant in the seat**,	[32] **presence or absence of an occupant in the seat**,		[32] The limitation, "presence or absence of an occupant in the seat" means whether the seat is occupied or not. col. 6, lines 1-4 and col. 16, line 51- col. 17, line 3; election of species (Fig. 9) dated May 8, 2000
the step of controlling deployment of the side airbag comprising at least one of the steps of suppressing deployment of the side airbag controlling a time at which deployment of the side airbag starts, controlling a rate of gas flow into the side airbag, controlling a rate of gas flow out of the side airbag and			

CLAIM 38 OF THE '387 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
controlling a rate of deployment of the side airbag.			

8. U.S. PATENT NO. 6,757,602

CLAIMS 1-2, 4, AND 8-10 OF THE '602 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. A method for controlling an [1]**occupant protection device** in a vehicle, **comprising the steps of**:	[1]**occupant protection device**		[1] An occupant protection device includes an airbag. (col. 1, line 64)
[2]**acquiring data from at least one sensor relating to an occupant in a seat to be protected by the occupant protection device**;	[2]**acquiring data from at least one sensor relating to an occupant in a seat to be protected by the occupant protection device**;		[2] Acquiring data from at least one sensor relating to an occupant in a vehicle seat who is to be protected by the occupant protection device. (col. 17, lines 46-49)
[3]**classifying the type of occupant based on the acquired data**;	ATI: ***classifying the type of occupant*** HONDA ET AL.: [3]**classifying the type of occupant based on the acquired data**;	Determining the type, class, size, position, orientation, identification, or status of an occupant. Col. 1, lines 49-56; col. 17, lines 49-52; col. 18, lines 11-16; col. 36, line 48 – col. 37, line 6; figs. 14, 16, 17, 18, 19.	[3] Classifying the type of occupant based on the acquired data. By classifying the type of occupant, it is meant classifying the occupant as either an empty seat or a rear-facing child seat using a processor employing an algorithm generated by a trained neural network. (Figure 12; col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 15, lines 35-39; col. 16, lines 48-53; col. 17, lines 49-52)
when the occupant is classified as an [4]**empty seat** or a [5]**rear-facing**	[4]**empty seat** [5]**rear-facing**		[4] The term "empty seat" means a vehicle seat with no contents.

child seat, [6]**disabling or adjusting deployment of the occupant protection device**;	**child seat**, [6]**disabling or adjusting deployment of the occupant protection device**;		[5] The term "rear-facing child seat" means a child seat that is rear facing, that is, when a child is present and properly seated, the child is facing the rear of the vehicle. (Fig. 4, col. 30, lines 66-67) [6] Disabling deployment of the airbag means disabling the airbag so that it will not deploy. (col. 30, line 65 – col. 31, line 2) "Adjusting deployment" means adjusting the rate of flow of gas into and/or out of the airbag and/or the orientation of deployment of the airbag. (col. 18, lines 21-24)
[7]**otherwise** [8]**classifying the size of the occupant based on the acquired data**;	[7]**otherwise** [8]**classifying the size of the occupant based on the acquired data**;		[7] If the occupant type is not classified as either an empty seat or a rear-facing child seat, then classifying the size of the occupant based on the same acquired data. (Figure 12, col. 37, lines 1-6) [8] Classifying the size of the occupant means determining whether the occupant is large, medium, or small using a processor employing an algorithm generated by a trained neural network. (Figure 12, col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 15, lines 35-39; col. 16, lines 48-53; col. 37, lines 3-6)
[9]**determining the position of the occupant** [10]**by means of one of a plurality of algorithms selected based on the classified size**	[9]**determining the position**		[9] To fix the point or area in space actually occupied by the occupant's head and/or chest relative to the air bag. The position of the occupant is determined using processor employing a position

of the occupant using the acquired data, [11]**each of the algorithms being applicable for a specific size of occupant**, and	[10]**by means of one of a plurality of algorithms selected based on the classified size** [11]**each of the algorithms being applicable for a specific size of occupant**, and		determining algorithm generated by one or more trained neural networks. (*Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004)); (see also col. 4, lines 43-46; col. 13, line 59 – col. 14, line 2; col. 16, lines 48-53). A detected physical characteristic of an occupying item, such as height of the passenger, is not the position because the position is a characteristic of the occupying item's relation to its environment. (Prosecution history of U.S. Pat. No. 6,283,503 to Breed, Paper #7, Amendment dated Nov. 21, 2000, p. 9). [10] Determining the position of the occupant by using one algorithm that is selected from at least two separate algorithms based upon the classified size of the occupant, each of the algorithms are trained neural networks for determining the position of the occupant using patterns of reflected or modified waves. (Figure 12; col. 13, line 59 – col. 14, line 2; col. 37, lines 12-23; col. 16, lines 48-53) [11] Each of the plurality of algorithms being applicable to determining the position of each specific size of an occupant. (Figure 12; col. 13, line 59 – col. 14, line 2; col. 37, lines 12-23; col. 16, lines 48-53)
[12]**disabling or adjusting deployment of the**	[12]**disabling or adjusting**		[12] Disabling or adjusting deployment of the airbag

occupant protection device [13]**when the determined position of the occupant is more likely to result in injury** [14]**to the occupant if the occupant protection device were to deploy.**	**deployment of the occupant protection device** [13]**when the determined position of the occupant is more likely to result in injury** [14]**to the occupant if the occupant protection device were to deploy.**		[13] When the determined position of the occupant relative to the airbag is more likely to result in injury [14] To the occupant if the airbag were to deploy than if it were not to deploy under the then operating conditions of the vehicle.
2. The method of claim 1, wherein the algorithms are [15]**pattern recognition algorithms**.	[15]**pattern recognition algorithms**.		[15] All of the algorithms referenced in claim 1 are pattern recognition algorithms. Pattern recognition algorithms are algorithms trained to recognize patterns of reflected or modified waves. col. 13, line 49 – col. 14, line 2; (RE 37,260 to Breed, col. 4, lines 49-55); (U.S. Pat. No. 5,822,707, col. 9, lines 31-32)
4. The method of claim 1, wherein the step of acquiring data from at least one sensor comprises [16]**the step of arranging a plurality of**	[16]**the step of arranging a plurality of sensors arranged in the**		[16]Identifying at least two sensors to be placed in the vehicle, installing the at least two sensors in the vehicle, checking the coverage of the at least two sensors, and adjusting the orientation of the at least two

sensors arranged in the vehicle, each of the sensors [17]**providing** data relating to the [18]**occupancy state of the seat**.	**vehicle**, [17]**providing** [18]**occupancy state of the seat**.		sensors if needed. (col. 41, lines 33-52) [17] Each of the sensors providing data relating to the occupancy state of the seat. [18] The phrase "occupancy state of the seat" is indefinite. However, if a construction must be given, the "occupancy state of the seat" refers to all possible occupancy states (e.g., forward facing adult, rear facing child seat, or empty seat) including type or class of any occupying items, the size of any occupying items, the position of any occupying item including the orientation of the occupying item, the identification of any occupying item and/or status of any occupying item (whether the occupying items or conscious or unconscious) and of one or more accessories (e.g., newspaper, books, maps, bottles, toys, hats, coats, boxes, bags and blankets). Thus, "data relating to the occupancy state" means data related to the specific occupancy state from these multiple possible occupancy states that is input into a processor employing a pattern recognition algorithm generated by a neural network. col. 1, lines 50-56; col. 13, line 59 – col. 14, line 2; col. 18, lines 32-36; col. 35, lines 9-18)
8. The method of claim 1, further comprising [19]**the step of providing a**	[19]**the step of providing a previous**		[19] Providing the determined position of the occupant from a previous time to the position determining algorithm and using

previous determination of the position of the occupant to the algorithm for determining a current position of the occupant.	**determination of the position of the occupant to the algorithm for determining a current position of the occupant**.		that previous position determination in determining the current occupant position. (Figure 12; col. 37, lines 16-29)
9. The method of claim 1, wherein the [20]**data from the at least one sensor is acquired periodically**.	[20]**data from the at least one sensor is acquired periodically**.		[20] Acquiring the data from the at least one sensor at regular time intervals. (col. 52, lines 64-66)
10. The method of claim 1, wherein adjustment of deployment of the occupant protection device when the occupant is classified as an empty seat or a rear-facing child seat comprises a [21]**depowered deployment**, an [22]**oriented deployment** or a [23]**late deployment**.	[21]**depowered deployment**, [22]**oriented deployment** [23]**late deployment**.		[21] The term "depowered deployment" means an airbag deployed with a reduced amount of gas flowing into the airbag relative to a default gas amount. (col. 2, lines 47-48) [22] The term "oriented deployment" means an airbag deployed at an angle different from a default angle. [23] The term "late deployment" means an airbag deployed at a point in time later than a default time.

EXHIBIT 10

CLAIMS 12 AND 16 OF THE '602 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
12. A method for controlling a [24]**component** in a vehicle, comprising the steps of:	[24]**component**		[24] A component in a vehicle includes seats, windows, sun visor, arm rest, etc. (col. 23, lines 15-17)
[25]**acquiring data from at least one sensor relating to an occupant of a seat** [26]**interacting with or** [27]**using the component**,	[25]**acquiring data from at least one sensor relating to an occupant of a seat** [26] **interacting with or** [27]**using the component**,		[25] Acquiring data from at least one sensor relating to an occupant of a seat interacting with or using the component that is to be controlled. [26] "Interacting with" means that the component and occupant are acting upon one another. Extrinsic: (*Merriam-Webster Online Dictionary*, Feb. 9, 2007, http://mw1.merriam-webster.com/dictionary/interacting) [27] "Using" means that the component is put into action or service. (Fig. 23D; col. 71, lines 10-13); Extrinsic: (*Merriam-Webster Online Dictionary*, Feb. 9, 2007, http://www.merriam-webster.com/dictionary/using)
[28]**determining an occupancy state of the seat based on the acquired data**;	ATI: ***determining an occupancy state*** HONDA ET AL.: [28]**determining an occupancy state of the seat**	Determining the status of a seat occupant (person/thing). Col. 1, lines 47-57; col. 38, lines 15-21; col. 38, lines 28-33; col. 39, lines 57-60; col. 40, lines 57-64; figs. 13, 14, 16, 17, 18.	[28] see claim 4, the phrase "occupancy state of the seat" is indefinite. However, if a construction must be given, the "occupancy state of the seat" refers to all possible occupancy states (e.g., forward facing adult, rear facing child seat, or empty seat) including type or class of any

	based on the acquired data;		occupying items, the size of any occupying items, the position of any occupying item including the orientation of the occupying item, the identification of any occupying item and/or status of any occupying item (whether the occupying items or conscious or unconscious). Thus, "determining the occupancy state" means determining the specific occupancy state from these multiple possible occupancy states using a processor employing a pattern recognition algorithm generated by a neural network. (col. 1, lines 50-56; col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 18, lines 32-36)
[29]**periodically acquiring new data from the at least one sensor**; for [30]**each time new data is acquired, determining the occupancy state of the seat based on the acquired new data and the determined occupancy state from a preceding time**; and	[29]**periodically acquiring new data from the at least one sensor**; [30]**each time new data is acquired, determining the occupancy state of the seat based on the acquired new data and the determined occupancy state from a preceding time**;		[29] Acquiring new data from the at least one sensor at regular time intervals. (col. 52, lines 64-66) [30] Each time new data is acquired, determining the occupancy state of the vehicle seat based on the acquired new data and the determined occupancy state from a preceding time. The occupancy state is determined using a processor employing an algorithm generated by a trained neural network. (Figure 13; col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 38, lines 17-26)
[31]**controlling the component based on the**	[31]**controlling the component**		[31] Controlling the component that the occupant is interacting with or using based

determined occupancy state of the seat.	**based on the determined occupancy state of the seat**.		on the determined occupancy state of the vehicle seat.
16. The method of claim 12, wherein the step of [32]**determining the occupancy state of the seat is performed using at least one pattern recognition algorithm**.	[32]**determining the occupancy state of the seat is performed using at least one pattern recognition algorithm**.		[32] Determining the occupancy state of the vehicle seat using a processor employing an algorithm generated by a trained neural network for determining the occupancy state of the seat. (col. 13, line 49 – col. 14, line 2; col. 41, line 33 – col. 43, line 10)

EXHIBIT 10

CLAIMS 18-19, 22-23, AND 26 OF THE '602 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
18. A method for controlling a component in a vehicle, comprising the steps of:			
acquiring data from at least one sensor relating to an occupant of a seat interacting with or using the component;			
[33]**identifying the occupant based on the acquired data**;	[33]**identifying the occupant based on the acquired data**;		[33] Identifying the occupant, including whether or not the occupant is a child seat, based on the acquired data. The occupant is identified using a processor employing an occupant identifying algorithm generated by one or more trained neural networks. (col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 15, lines 35-39; col. 16, lines 48-53; col. 19, lines 26-27; col. 38, lines 28-34; Figure 14)
determining the position of the occupant based on the acquired data;			
[34]**controlling the component based on at least one of the identification of the occupant and the determined position of the occupant**;	[34]**controlling the component based on at least one of the identification of the occupant and the determined position of the**		[34] Controlling the component based on at least one of the identification of the occupant and the determined position of the occupant.

	occupant;		
periodically acquiring new data from the at least one sensor; and [35]**for each time new data is acquired, identifying the occupant based on the acquired new data and an identification from a preceding time** and [36]**determining the position of the occupant based on the acquired new data and then controlling the component based on at least one of the identification of the occupant and the determined position of the occupant**.	[35]**for each time new data is acquired, identifying the occupant based on the acquired new data and an identification from a preceding time** and [36]**determining the position of the occupant based on the acquired new data and then controlling the component based on at least one of the identification of the occupant and the determined position of the occupant**.		[35]Every time new data is acquired identifying the occupant based on the acquired new data and an identification from a preceding time. The occupant is identified using a processor employing an occupant identifying algorithm generated by one or more trained neural networks. (Figure 14; col. 13, line 59 – col. 14, line 2; col. 16, lines 48-53; col. 38, lines 52-60) [36] Determining the position of the occupant based on the acquired new data. The occupant positioned is determined using a processor employing a position determining algorithm generated by a trained neural network. (Figure 14; col. 13, line 59 – col. 14, line 2; col. 16, lines 48-53; col. 38, lines 40-44).
19. The method of claim 18, wherein the step of determining the position of the occupant based on the acquired new data comprises the step of [37]**considering a determination of the position of the occupant**	[37]**considering a determination of the position of the occupant from the preceding time**.		[37] The position determining algorithm considers the position of the occupant's head and/or chest relative to the component from the preceding time.

from the preceding time.			
22. The method of claim 18, further comprising the step of selecting the at least one sensor from a group consisting of a camera, an ultrasonic sensor, [38]**a capacitive sensor or other electric or magnetic field monitoring sensor**, [39]**a weight or other morphological characteristic detecting sensor** and [40]**a seat position sensor**.	[38]**a capacitive sensor or other electric or magnetic field monitoring sensor**, [39]**a weight or other morphological characteristic detecting sensor** [40]**a seat position sensor**.		[38] This term is vague and ambiguous. The specification inconsistently defines "a capacitive sensor or other electric or magnetic field monitoring sensor" as a beam-emitting sensor (col. 10, lines 9-11; col. 10, line 23 – col. 11, line 31), and as a non-beam-emitting sensor (U.S. Pat. No 5,602,734 to Kithil, incorporated by reference, col. 2, lines 15-31); (see also Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3). Thus this limitation is indefinite. Alternatively, if this limitation is to be provided a construction, an electric field sensor is a non-beam-emitting sensor including a transmitter electrode and a receiver electrode that monitors changes in capacitance at the receiver electrode. (U.S. Pat. No 5,602,734 to Kithil, incorporated by reference, col. 2, lines 15-31; col. 5, lines 5-13; col. 8, lines 9-12); (see also Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9,

			Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3) [39] The term "a weight or other morphological characteristic detecting sensor" means a device that determines the size, shape, or the force that gravitation exerts on the occupying item, equal to the mass of an occupying item times the local acceleration of gravity. (col. 11, lines 28-31) [40] The term "a seat position sensor" means a device that quantifies the position of a seat with respect to a fixed position on the vehicle. (col. 54, lines 66-67)
23. The method of claim 18, further comprising the step of selecting the at least one sensor from a group consisting of [41]**an electric or magnetic wave sensor**, [42]**an electric field sensor**, a seat belt buckle sensor, a seatbelt payout sensor, an	[41]**an electric or magnetic wave sensor**, [42]**an electric field sensor**,		[41] This term is vague and ambiguous. The specification inconsistently defines "a capacitive sensor or other electric or magnetic field monitoring sensor" as a beam-emitting sensor (col. 10, lines 9-11; col. 10, line 23 – col. 11, line 31), and as a non-beam-emitting sensor (U.S. Pat. No 5,602,734 to Kithil, incorporated by reference, col. 2, lines 15-31); (see also

infrared sensor, an inductive sensor, a radar sensor, [43]**a weight distribution sensor**, a reclining angle detecting sensor for detecting a tilt angle of the seat between a back portion of the seat and a seat portion of the seat, an accelerometer and a heartbeat sensor for sensing a heartbeat of the occupant.	[43]**a weight distribution sensor**		Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3). Thus this limitation is indefinite. Alternatively, if this limitation is to be provided a construction, an electric field sensor is a non-beam-emitting sensor including a transmitter electrode and a receiver electrode that monitors changes in capacitance at the receiver electrode. (U.S. Pat. No 5,602,734 to Kithil, incorporated by reference, col. 2, lines 15-31; col. 5, lines 5-13; col. 8, lines 9-12); (see also Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3) [42] The term “electric field sensor” should be construed the same as an “electric or magnetic wave sensor”. (col. 10, lines 1-3)

			[43] The term "weight distribution sensor" means a transducer that senses the distribution of the force that gravitation exerts on an occupying item, equal to the mass of the occupying item times the local acceleration of gravity.
26. The method of claim 18, wherein the step of determining the position of the occupant comprises the step of [44]**inputting the acquired data into one of a plurality of algorithms selected based on the identification of the occupant**, [45]**each of the algorithms being applicable for a specific identification of the occupant**.	[44]**inputting the acquired data into one of a plurality of algorithms selected based on the identification of the occupant**, [45]**each of the algorithms being applicable for a specific identification of the occupant**.		[44] Inputting the acquired new data into an algorithm selected from a plurality of separate algorithms based on the occupant identification. (col. 39, lines 4-8) [45] Each of the plurality of separate algorithms being applicable for a specific occupant identification. (col. 39, lines 4-8)

EXHIBIT 10

CLAIMS 32-33 OF THE '602 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
32. A method for controlling a component in a vehicle, comprising the steps of:			
acquiring data from at least one sensor relating to an occupant of a seat interacting with or using the component;			
identifying an occupant based on the acquired data;			
determining the position of the occupant based on the acquired data;			
controlling the component based on at least one of the identification of the occupant and the determined position of the occupant;			
periodically acquiring new data from the at least one sensor; and [46]**for each time new data is acquired, identifying an occupant based on the acquired new data and** [47]**determining the position of the occupant based on the acquired new data and a determination of the position of the occupant from a preceding**	[46]**for each time new data is acquired, identifying an occupant based on the acquired new data and** [47]**determining the position of the occupant based on the**		[46] Every time new data is acquired identifying the occupant based on the acquired new data and an identification from a preceding time. The occupant is identified using a processor employing an occupant identifying algorithm generated by one or more trained neural networks. col. 13, line 59 – col. 14, line 2; col. 16, lines 48-53 [47] Determining the position of the occupant based on the acquired new data

time [48]**and then controlling the component based on at least one of the identification of the occupant and the determined position of the occupant**.	**acquired new data and a determination of the position of the occupant from a preceding time** [48]**and then controlling the component based on at least one of the identification of the occupant and the determined position of the occupant**.		and a determination of the position of the occupant from a preceding time. The occupant position is determined using a processor employing a position determining algorithm created from a trained neural network. col. 13, line 59 – col. 14, line 2; col. 16, lines 48-53 [48] Controlling the component based on at least one of the occupant's identification or position.
33. The method of claim 32, wherein the step of identifying the occupant based on the acquired new data comprises the step of [49]**considering an identification of the occupant from the preceding time.**	[49]**considering an identification of the occupant from the preceding time.**		[49] The algorithm for identifying the occupant considers an identification of the occupant from the preceding time. (col. 38, lines 55-59)

EXHIBIT 10

CLAIMS 46 AND 55 OF THE '602 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
46. A method for controlling a component in a vehicle, comprising the steps of:			
acquiring data from at least one sensor relating to an occupant of a seat interacting with or using the component;			
identifying the occupant based on the acquired data;			
[50]**when the occupant is identified as a child seat, determining the orientation of the child seat based on the acquired data,** [51]**determining the position of the child seat** [52]**by means of one of a plurality of algorithms selected based on the determined orientation of the child seat, each of the algorithms being applicable for a specific orientation of a child seat**, and	[50]**when the occupant is identified as a child seat, determining the orientation of the child seat based on the acquired data,** [51]**determining the position of the child seat**		[50] When the occupant of the vehicle seat is identified as a child seat, determining whether the child seat is in a rear or forward facing orientation, by feeding the acquired new data into an algorithm created by a trained neural network. (Figure 16; col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 15, lines 35-39; col. 16, lines 48-53; col. 40, lines 5-8) [51] To fix the point or area in space actually occupied by the child seat relative to the air bag. The position of the child seat is determined using processor employing a position determining algorithm generated by one or more trained neural networks. (*Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004)); (see also col. 4, lines 43-46; col.

	[52]**by means of one of a plurality of algorithms selected based on the determined orientation of the child seat, each of the algorithms being applicable for a specific orientation of a child seat**,		13, line 59 – col. 14, line 2; col. 16, lines 48-53;). A detected physical characteristic of an occupying item, such as height of the passenger, is not the position because the position is a characteristic of the occupying item's relation to its environment. (Prosecution history of U.S. Pat. No. 6,283,503 to Breed, Paper #7, Amendment dated Nov. 21, 2000, p. 9). [52] Determining the position of the child seat by selecting one algorithm from a plurality of separate algorithms created by trained neural networks wherein the algorithm is selected based on the determined orientation of the child seat, each of the plurality of algorithms specifically applicable to either a forward or rear facing child seat.
[53]**controlling the component based on the determined position of the child seat**; and	[53]**controlling the component based on the determined position of the child seat**; and		[53] Controlling the component based on the determined position of the child seat relative to the airbag.
[54]**when the occupant is identified as other than a child seat, determining at least one of the size and position of the occupant**, and	[54]**when the occupant is identified as other than a child seat, determining at least one of the size and position of the occupant**,		[54] When the occupant is identified as not being a child seat, determining the size or position of the occupant using a processor employing an algorithm created by a trained neural network. (Figure 16; col. 13, lines 49-54; col. 13, line 59 – col. 14, line 2; col. 16, lines 48-53; col. 39, lines 63-66)

[55]**controlling the component based on the at least one of the size and position of the occupant**.	[55]**controlling the component based on the at least one of the size and position of the occupant**.		[55] Controlling the component based on at least one of the size and the position of the occupant.
55. The method of claim 46, further comprising the step of selecting the at least one sensor from a group consisting of an [56]**electromagnetic wave sensor**, an electric field sensor, a seat belt buckle sensor, a seatbelt payout sensor, an infrared sensor, an inductive sensor, a radar sensor, a weight distribution sensor, a reclining angle detecting sensor for detecting a tilt angle of the seat between a back portion of the seat and a seat portion of the seat, an accelerometer and a heartbeat sensor for sensing a heartbeat of the occupant.	[56]**electromagnetic wave sensor**,		[56] This term is vague and ambiguous. The specification incorporates Kithil by reference (U.S. Pat. No. 5,602,734) and defines the capacitive sensor discloses in Kithil as an electromagnetic wave or beam-emitting sensor (‘602 patent, col. 10, lines 9-11). The specification of Kithil, however, defines the capacitive sensor disclosed therein as a non-beam-emitting sensor. (U.S. Pat. No 5,602,734 to Kithil, incorporated by reference, col. 2, lines 15-31); (see also Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3). Thus the ‘602 specification inconsistently defines an “electromagnetic wave sensor”; thus this limitation is indefinite. Alternatively, if this limitation is to be provided a construction, an electric field sensor is a non-beam-emitting sensor

			including a transmitter electrode and a receiver electrode that monitors changes in capacitance at the receiver electrode. (U.S. Pat. No 5,602,734 to Kithil, incorporated by reference, col. 2, lines 15-31; col. 5, lines 5-13; col. 8, lines 9-12); (see also Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3)

9. U.S. PATENT NO. 6,850,824

CLAIMS 1-2, 4-5, 7-8 and 12 of the '824 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. In a motor vehicle, [1]**a control system for controlling** an [2]**occupant restraint system**, comprising:	[1]**a control system for controlling** [2]**occupant restraint system**,		[1] An assemblage of inter-related elements designed to control operation of [2] a device or instrument that is deployable for the purpose of protecting an occupant in the event of a crash.

a [3]**plurality of** [4]**electronic sensors** [5]**mounted at different locations** [6]**on the vehicle**, each of said sensors providing a [7]**measurement related to a state of said sensor** or a [8]**measurement related to a state of the mounting location**; and	[3]**plurality of** [4]**electronic sensors** [5]**mounted at different locations** [6]**on the vehicle**, [7]**measurement related to a state of said sensor** [8]**measurement related to a state of the mounting location**; and		[3] More than one [4] A measuring or sensing device having electronic capabilities mounted on the vehicle. (col. 29, lines 37-40) [5] "mounted at different locations" means each of the multiple electronic sensors is affixed to a different part of the vehicle. (Figure 7; col. 36, line 62 – col. 37, line 38) [6] "on the vehicle" means in contact with the vehicle. (Figure 7; col. 36, line 62 – col. 37, line 38) [7] A measurement of the velocity, acceleration, angular orientation, temperature, or a state of the mounting location. (col. 42, lines 6-9) [8] The phrase "measurement related to a state of the mounting location" is vague and ambiguous. The specification does not distinguish between the "state of said sensor" from "state of the mounting location."
[9]**a processor coupled to said sensors** and [10]**arranged to diagnose** [11]**the state of the vehicle** [12]**based on the measurements of said sensors**,	ATI: ***processor coupled to said sensors and arranged to diagnose the state of the vehicle*** HONDA ET AL.:	Processor connected to said sensors to diagnose the vehicle's state with respect to its stability and proper running and operation Col. 10, lines 14-26.	[9] A microprocessor, microcontroller, neural processor, FGPA, or DSP. (col. 34, lines 8-15; col. 79, lines 44-50) [10] Arranged to diagnose means the processor uses a trained pattern recognition algorithm to diagnose the state of the vehicle. (col. 31, lines 10-12; col. 32, line

	[9]**a processor coupled to said sensors** [10]**arranged to diagnose** [11]**the state of the vehicle** [12]**based on the measurements of said sensors**,		59 – col. 33, line 21; col. 33, lines 54-58; col. 34, lines 4-19, 48-54; col. 80, lines 40-43); (Prosecution History of U.S. Patent No. 6,484,080, Paper #11, Notice of Allowability, p. 2) [11] Condition of the vehicle with respect to stability and proper running and operating condition. (col. 10, lines 14-17). [12] Based on the measurements of the sensors. col. 32, lines 54-58; col. 37, lines 51-54; col. 38, line 18-21; col. 80, lines 40-43)
[13]**said processor being arranged to control the occupant restraint system** [14]**based at least in part on the diagnosed state of the vehicle in an attempt to minimize injury to an occupant**.	[13]**said processor being arranged to control the occupant restraint system** [14]**based at least in part on the diagnosed state of the vehicle in an attempt to minimize injury to an occupant**.		[13] The processor that controls the occupant restraint system is the same processor that diagnoses the state of the vehicle. (col. 80, lines 58-65; col. 81, lines 48-59); (Prosecution History of U.S. Patent No. 6,484,080, Paper #11, Notice of Allowability, p. 2) [14] The phrase "in an attempt to minimize injury to an occupant" is vague and ambiguous and not subject to construction.
2. The vehicle of claim 1, wherein at least one of said sensors is [15]**selected from a group consisting**	[15]**selected from a group consisting of**		[15] "Selected from a group consisting of A, B, C, and D" means A, B, C, or D. [16] A single axis acceleration sensor is a

of a [16]**single axis acceleration sensor**, a [17]**double axis acceleration sensor**, a [18]**triaxial acceleration sensor** and a [19]**gyroscope**.	[16]**single axis acceleration sensor**, [17]**double axis acceleration sensor**, [18]**triaxial acceleration sensor** [19]**gyroscope**.		sensor that measures acceleration along one axis. [17] A double axis acceleration sensor is a sensor that measures acceleration along two axes. [18] A triaxial acceleration sensor is a sensor that measures acceleration along three axes. [19] A gyroscope is an instrument that measures orientation.
4. The vehicle of claim 1, wherein the state of the vehicle diagnosed by said processor includes [20]**angular motion of the vehicle.**	[20]**angular motion of the vehicle.**		[20] A quantity of movement of the vehicle which indicates rotation about one or more axes. (col. 42, lines 44-47)
5. The vehicle of claim 1, wherein the state of the vehicle diagnosed by said processor includes [21]**a determination of a location of an impact between the vehicle and another object.**	[21]**a determination of a location of an impact between the vehicle and another object.**		[21] The location on the vehicle at which the vehicle collided with another object. (col. 31, lines 50-58)
7. The vehicle in claim 1, wherein at least one of said sensors is a [22]**weight sensor** [23]**coupled to a seat in the vehicle for sensing the weight of an**	[22]**weight sensor** [23]**coupled to a**		[22] A sensor that calculates the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity. (col. 83, lines 18-21

[24]**occupying item of the seat**, said [25]**weight sensor being coupled to said processor** and said [26]**processor controlling the occupant restraint system** [27]**based on the state of the vehicle and the weight of the occupying item of the seat sensed by said weight sensor**.	**seat in the vehicle for sensing the weight of an** [24]**occupying item of the seat**, [25]**weight sensor being coupled to said processor** [26]**processor controlling the occupant restraint system** [27]**based on the state of the vehicle and the weight of the occupying item of the seat sensed by said weight sensor**.		[23] Directly connected to the seat in the vehicle for calculating the force that gravitation exerts upon a body, equal to the mass of the body multiplied by the local acceleration of gravity. (col. 13, lines 9-11; col. 82, lines 56-64) [24] An object that occupies a seated area, such as a human occupant or a bag of groceries. (col. 21, lines 28-29). [25] The weight sensor is in communication with the processor. (col. 13, lines 11-14) [26] The processor that controls the occupant restraint device is the same processor that diagnoses the state of the vehicle and determines the weight of the occupying item on the seat. (col. 13, lines 11-14) [27] This processor controls the occupant restraint device based on both the diagnosed state of the vehicle and the weight of the occupying item using a trained pattern recognition algorithm. (col. 13, lines 11-14)
8. The vehicle of claim 1, wherein said processor includes [28]**pattern recognition means for diagnosing the state of the**	[28]**pattern recognition means for diagnosing the state of the**		[28] Pattern recognition means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: diagnosing the state of the

vehicle.	**vehicle**.		vehicle. Structure: trained pattern recognition algorithm, neural networks and modular neural networks or other trained pattern recognition systems. col. 31, lines 10-12; col. 32, line 59 – col. 33, line 21; col. 33, lines 54-58; col. 34, lines 4-19, 48-54; col. 80, lines 40-43); (Prosecution History of U.S. Patent No. 6,484,080, Paper #11, Notice of Allowability, p. 2)
12. The vehicle of claim 1, where in the state of the vehicle includes angular acceleration, a plurality of said sensors comprising accelerometers such that [29]**said processor determines the angular acceleration of the vehicle based on the acceleration measured by said accelerometers**.	[29]**said processor determines the angular acceleration of the vehicle based on the acceleration measured by said accelerometers**.		[29] The same processor recited in claim 1 also determines the angular acceleration of the vehicle based on the acceleration measured by accelerometers. (col. 13, lines 15-16 Angular acceleration is a quantity of movement of the vehicle which indicates acceleration about one or more axes. (col. 42, lines 44-47

10. U.S. PATENT NO. 6,869,100

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. A method for controlling deployment	[1]**the steps of**:		[1] A method for controlling deployment of an airbag comprising the enumerated steps.

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
of an airbag comprising [1]**the steps of**:			
[2]**determining the position of an occupant to be protected by deployment of the airbag**;	ATI: ***determining the position of an occupant*** HONDA ET AL.: [2]**determining the position of an occupant to be protected by deployment of the airbag**;	Determining the position of the head or chest of an occupant. Col. 4, lines 39-46.	[2] To fix the point or area in space actually occupied by the occupant's head and/or chest relative to the air bag. The position of the occupant is determined using processor employing a position determining algorithm generated by one or more trained neural networks. (*Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004)); ('100 patent, col. 4, lines 43-46; col. 5, lines 12-18); A detected physical characteristic of an occupying item, such as height of the passenger, is not the position because the position is a characteristic of the occupying item's relation to its environment. (Prosecution history of U.S. Pat. No. 6,283,503 to Breed, Paper #7, Amendment dated Nov. 21, 2000, p. 9).
[3]**assessing the probability that a crash requiring deployment of the airbag is occurring**;	[3]**assessing the probability that a crash requiring deployment of the airbag is occurring**;		[3] To assign a value (expressed as a percentage, e.g., 50% or 95%) that can vary continuously from 0% to 100% to the likelihood that a crash requiring the deployment of an airbag is occurring. (col. 8, lines 49-58)

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
[4]**enabling deployment** of the airbag [5]**in consideration of the determined position of the occupant and the assessed probability that a crash is occurring**, said [6]**deployment enabling step comprising the steps of analyzing the assessed probability relative to** [7]**a pre-determined threshold** and enabling deployment of the airbag is [8]**only when** [9]**the assessed probability is greater than the threshold**; and	ATI: ***determined position*** ATI: ***a predetermined threshold*** HONDA ET AL.: [4]**enabling deployment** [5]**in consideration of the determined position of the occupant and the assessed probability that a crash is occurring**, [6]**deployment enabling step comprising the steps of analyzing the assessed probability relative to**	The position of the head or chest of an occupant. Col. 4, lines 39-46. A value determined in advance. Col. 16, lines 11-17; fig. 9.	[4] Transmitting a control signal to the airbag that enables deployment of the airbag. [5] In consideration of the determined position of the occupant's head and/or chest relative to the airbag the assigned percentage that a crash is occurring. (Figure 9; col. 8, lines 53-58; col. 16, lines 5-8) [6] Comparing the assigned percentage that a crash is occurring to a pre-set threshold. col. 16, lines 11-17, 31-45; block 908 of Figure 9) [7] The term "pre-determined" means pre-set. (col. 16, lines 11-15) The term "threshold" means a set level associated with a percentage value, where an assessed probability that exceeds that level indicates that a crash is occurring. (col. 7, lines 22-23; col. 8, lines 53-59) [8] The phrase "only when" means under no other conditions. [9] Airbag deployment is enabled under no other conditions except when the crash

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
	[7]**a pre-determined threshold** [8]**only when** [9]**the assessed probability is greater than the threshold**;		probability exceeds the pre-determined threshold. (Figure 9; col. 8, lines 53-58)
[10]**adjusting the threshold based on the determined position** of the occupant.	[10]**adjusting the threshold based on the determined position**		[10] To change the predetermined threshold to an adjusted value between 0% to 100% based on the determined position of the occupant's head and/or chest relative to the airbag. (col. 8, lines 49-58)
2. The method of claim 1, wherein the step of determining the position of the occupant comprises [11]**the step of receiving** [12]**waves** [13]**from a space in a passenger compartment of the vehicle occupied by the**	ATI: ***waves from a space*** HONDA ET AL.: [11]**the step of receiving**	Electromagnetic, ultrasonic, acoustic, or optical waves from an area. Col. 8, lines 36-41; col. 10, lines 17-21; col. 13, lines 61-64; figs. 1, 2, 3, 4.	[11] "Receiving waves" means receiving waves after impact with the occupant. (col. 5, lines 44-46; col. 8, lines 36-41; col. 9, lines 20-22; col. 10, lines 9-17, 18-25; col. 11, lines 35-54; col. 12, lines 25-31, 54-60; col. 13, lines 25-26; col. 14, lines 64-65); (Prosecution History of U.S. Pat. No. 6,513,830, incorporated by reference, Paper #9, Amendment dated March 8, 2002, p. 3)

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
occupant.	[12]**waves** [13]**from a space in a passenger compartment of the vehicle occupied by the occupant**.		[12] The term, "waves" means propagating signals that have a direction of propagation, velocity of propagation, and a wavelength which depend on the property of the materials in which the waves exists and the type of waves (e.g., acoustic, mechanical, electromagnetic). (col. 6, lines 45-48; col. 10, lines 18-25; col. 11, line 46-54; col. 12, line 13; col. 14, lines 44-47); (Prosecution History of U.S. Pat. No. 6,513,830 to Breed, incorporated by reference, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, incorporated by reference, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3) [13] From the space in the passenger compartment of the vehicle occupied by the occupant's head and/or chest. (col. 4, lines 43-46; col. 5, lines 44-46; col. 6, lines 48-50; col. 11, lines 18-21)
11. The method of claim 1, wherein the step of determining the position of the occupant comprises [14]**the step**	[14]**the step of arranging an** [15]**electric field sensor**		[14] Placing (col. 13, lines 14-15, 31-33) [15] This term is vague and ambiguous. Electric field sensor is defined inconsistently as

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
of arranging an [15]**electric field sensor** [16]**operative in a seat occupied by the occupant**.	[16]**operative in a seat occupied by the occupant**.		a beam-emitting sensor (col. 11, lines 1-27) and as a non-beam-emitting sensor. (Prosecution History of U.S. Pat. No. 6,513,830 to Breed, incorporated by reference, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, incorporated by reference, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3); (U.S. Pat. No 5,602,734 to Kithil, col. 2, lines 15-31). Thus this limitation is indefinite. Alternatively, if this limitation is to be provided a construction, an electric field sensor is a non-beam-emitting sensor including a transmitter electrode and a receiver electrode that monitors changes in capacitance at the receiver electrode. (Prosecution History of U.S. Pat. No. 6,513,830 to Breed, incorporated by reference, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, incorporated by reference, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3); (U.S. Pat. No 5,602,734 to Kithil, col. 2, lines 15-31; col. 5,

CLAIMS 1-2 AND 11 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
			lines 5-13; col. 8, lines 9-12). [16] Placed inside a seat.

CLAIMS 16-17 AND 29-31 OF THE '100 PATENT CLAIM	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
16. A method for controlling deployment of an airbag, comprising [17]**the steps of**:	[17]**the steps of**:		[17] A method for controlling deployment of an airbag comprising the enumerated steps.
determining the position of an occupant to be protected by deployment of the airbag; and			
adjusting a threshold used in a [18]**sensor algorithm based on the determined position** of the occupant, [19]**the sensor algorithm enabling or suppressing deployment of the airbag.**	ATI: ***adjusting a threshold*** HONDA ET AL.: [18]**adjusting a threshold used in a sensor algorithm** [19]**the sensor algorithm enabling or suppressing deployment of the airbag.**	Adjusting a value. Col. 16, lines 19-20; fig. 9.	[18]The "sensor algorithm" performs the algorithm disclosed in Figure 9. (Figure 9; col. 15, line 51 – col. 16, line 26) [19] The sensor algorithm transmits a control signal to the airbag that enables deployment of the airbag.

CLAIMS 16-17 AND 29-31 OF THE '100 PATENT CLAIM	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
17. The method of claim 16, further comprising the steps of:			
assessing the probability that a crash requiring deployment of the airbag is occurring;			
analyzing the assessed probability **relative to the threshold**; and	ATI: ***relative to a threshold***	In relation to a value. Col. 16, lines 11-20; fig. 9.	
enabling deployment of the airbag only when the assessed probability is greater than the threshold.			
29. The method of claim 16, further comprising the step of [20]**disabling deployment of the airbag when the determined position is too close to the airbag**.	ATI: ***too close*** HONDA ET AL. [20]**disabling deployment of the airbag when the determined position is too close to the airbag**.	Within a distance. Col. 6, lines 63-64; col. 16, lines 21-23; col. 13, lines 9-13.	[20] The term "too close" is vague and ambiguous and incapable of construction. However, if a construction must be given, "disabling deployment of the airbag when the determined position is too close" means comparing the position of the occupant's head and/or chest relative to the airbag to a predetermined distance, and communicating a disable signal to the airbag when the occupant's head and/or chest is closer than the predetermined distance. (col. 13, lines 11-16)

CLAIMS 16-17 AND 29-31 OF THE '100 PATENT CLAIM	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
30. The method of claim 16, further comprising the step of [21]**determining the rate at which the airbag is inflated based on the determined position of the occupant**.	[21]**determining the rate at which the airbag is inflated based on the determined position of the occupant**.		[21] Modifying the inflation rate of the airbag based on the position of the occupant's head and/or chest relative to the airbag. (col. 13, line 21-23)
31. The method of claim 16, further comprising the step of [22]**determining the time in which the airbag is deployed based on the determined position of the occupant**.	[22]**determining the time in which the airbag is deployed based on the determined position of the occupant**.		[22] Adjusting the time it takes the airbag to deploy, that is the inflation rate of the airbag, based on the determined position of the occupant's head and/or chest relative to the airbag. (col. 13, line 21-23)

CLAIMS 32 AND 45-46 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
32. A system for controlling deployment of an airbag comprising:			
[23]**determining means for determining the position of an occupant to be protected by deployment of the airbag**;	ATI: ***determining means for determining*** HONDA ET AL.: [23]**determining means for determining the position of an occupant to be protected by deployment of the airbag**;	Structure to determine. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is determining the position of an occupant to be protected by deployment of the airbag. Structure to perform the function includes that described in the patent specification and equivalents, such as ultrasonic generators, receptors, infrared light, lenses, arrays of charge coupled devices (CCD arrays), logic circuitry, beams of radiation, algorithms, transmitters, receivers, sensors, capacitance or capacitive sensors, electric field sensors. Waves may be ultrasonic, radar, electromagnetic, passive infrared, and capacitive. Col. 4, lines 39-46; col. 5, lines 44-62; col. 6, lines 47-62.	[23] Determining means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Determining the position of an occupant's head and/or chest. Structure: The structure for determining position includes an ultrasonic wave transmitter and ultrasonic wave receiving sensor. An electronic circuit or microprocessor employs a pattern recognition algorithm to determine the position of the occupant relative to an airbag based on information from the transmitter/receiver assembly. (col. 5, lines 12-18, 44-46; col. 6, lines 47-62; col. 8, lines 36-45; col. 10, lines 18-25; col. 11, lines 35-54; col. 12, lines 54-60; col. 13, lines 23-26) The structure for determining position may also include an optical infrared transmitter and receiver assembly mounted on an instrument panel facing the windshield. (col. 9, lines 20-22; col. 13, lines 37-41; col. 14, lines 44-65)

			The structure includes an imaging device, such as a camera, for receiving two or three dimensional images and focusing the image onto optical arrays. (col. 11, lines 6-10) The structure for determining position may be a scanning device, such as radar, which moves a beam of radiation through a passenger compartment of the vehicle. (col. 10, lines 9-17; col. 11, lines 13-15) The structure for determining position may be a voltage controlled oscillator and transmitters and receivers for transmitting and receiving radio waves. (col. 12, lines 25-31)
[24]**sensor means for assessing the probability that a crash requiring deployment of the airbag is occurring**; and	ATI: ***sensor means for assessing*** HONDA ET AL.: [24]**sensor means for assessing the probability that a crash requiring deployment of the airbag is occurring**;	Structure to assess. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is assessing the probability that a crash requiring deployment of the airbag is occurring. Structure to perform the function includes that described in the patent specification and equivalents, such as electronic sensors, and crash sensors. Col. 14, lines 38-41; col. 16, lines 4-5.	[24] Sensor means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Assessing the probability that a crash requiring deployment of the airbag is occurring. Structure: The structure is a crash sensor, a microprocessor, or a sensor algorithm. The specification does not disclose an algorithm for assessing the probability that a crash is occurring. (col. 8, lines 50-51; col. 16, lines 4-5) Therefore, this limitation is incapable of

			construction.
[25]**circuit means coupled to said determining means, said sensor means and the airbag for enabling deployment of the airbag** in consideration of the determined position of the occupant and the assessed probability that a crash is occurring, said [26]**circuit means being structured and arranged to analyze the assessed probability relative to a pre-determined threshold and enable deployment of the airbag only when the assessed probability is greater than the threshold**;	[25]**circuit means coupled to said determining means, said sensor means and the airbag for enabling deployment of the airbag** [26]**circuit means being structured and arranged to analyze the assessed probability relative to a pre-determined threshold and enable deployment of the airbag only when the assessed probability is greater than the threshold**;		[25] The circuit means is connected to the determining means, the sensor means, and the airbag. [26] Circuit means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. . The circuit means has several functions. Function 1: Analyzing the assessed probability that a crash is occurring relative to a pre-determined threshold. Function 2: Enabling deployment of the airbag only when the assessed probability is greater than the pre-determined threshold. Structure: The structure disclosed for the "circuit means" is processor programmed to perform the algorithm illustrated in Figure 9. (col. 15, line 51 – col. 16, line 45)
said [27]**circuit means being further arranged to adjust the threshold based on the determined position of the occupant**.	[27]**circuit means being further arranged to adjust the threshold based on the determined**		[27] Function 3: Adjust the threshold based on the determined position of the occupant. Structure: The structure is a processor programmed to perform step 912 of Figure 9.

	position of the occupant.		
45. The system of claim 32, wherein the [28]**airbag has an adjustable inflation rate**, said circuit means are [29]**arranged to determine the rate at which the airbag is inflated based on the determined position of the occupant**.	[28]**airbag has an adjustable inflation rate**, [29]**arranged to determine the rate at which the airbag is inflated based on the determined position of the occupant**.		[28] The airbag is configured to receive a control signal that directs the airbag to adjust the rate of inflation. [29] The specification does not disclose arranging the circuit means to determine the rate at which the airbag is inflated based on the determined position of the occupant. Therefore, this limitation is not supported by the spec.
46. The system of claim 32, wherein the [30]**airbag has an adjustable deployment time**, said circuit means are [31]**arranged to determine the time in which the airbag is inflated based on the determined position of the occupant**.	[30]**airbag has an adjustable deployment time**, [31]**arranged to determine the time in which the airbag is inflated based on the determined position of the occupant**.		[30] The airbag is configured to receive a control signal that directs the airbag to adjust the time of inflation. [31] The specification does not disclose arranging the circuit means to determine the time in which the airbag is inflated based on the determined position of the occupant. Therefore, this limitation is not supported by the spec.

EXHIBIT 10

CLAIM 47 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
47. A system for controlling deployment of an airbag, comprising:			
a [32]**crash sensor** for [33]**providing information on a crash involving the vehicle**;	[32]**crash sensor** [33]**providing information on a crash involving the vehicle**;		[32] A device for predicting the occurrence of a crash. (col. 2, line 31) [33] Assessing the probability that a crash is occurring. (col. 16, lines 4-5)
a [4]**position determining arrangement for determining the position of an occupant to be protected by deployment of the airbag**; and	ATI: ***position determining arrangement for determining*** HONDA ET AL: [34]**position determining arrangement for determining the position of an occupant to be protected by deployment of the airbag**;	Structure to determine. Col. 5, lines 44-62; col. 6, lines 47-62, col. 8, lines 26-34. In the event this is construed as a means-plus-function limitation subject to 35 U.S.C. § 112(6), the function is determining the position of an occupant to be protected by deployment of the airbag. Structure to perform the function includes that described in the patent specification and equivalents, such as transmitters, receivers, sensors, waves that may be ultrasonic, radar, electromagnetic, passive infrared, and the like, and capacitive. Col. 5, lines 44-62; col. 6, lines 47-62, col. 8, lines 26-34.	[34] This term should be construed as a means-plus-function element under § 112 ¶ 6. Function: Determining the position of an occupant's head and/or chest. Structure: same structure discussed with respect to claim 32.
a [35]**circuit** [36]**coupled**	[35]**circuit**		[35] A microprocessor employing an

CLAIM 47 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
to the airbag, said crash sensor and said position determining arrangement and [38]**arranged to issue a deployment signal to the airbag to cause deployment of the airbag,**	[36]**coupled to the airbag, said crash sensor and said position determining arrangement** [37]**arranged to issue a deployment signal to the airbag to cause deployment of the airbag,**		algorithm that generates a deployment signal based on a deployment threshold and the position of an occupant's head and/or chest relative to the airbag. (col. 10, lines 14-17) [36] The circuit is connected to the airbag, crash sensor and position determining arrangement. (col. 7, lines 17-19 [37] The circuit is also programmed to activate the airbag inflator. (col. 16, lines 36-40)
said circuit being [38]**arranged to determine a deployment threshold which varies based on the determined position of the occupant and consider the deployment threshold value when deciding whether to issue the deployment signal.**	[38] **arranged to determine a deployment threshold which varies based on the determined position of the occupant and consider the deployment threshold value when deciding**		[38] The circuit is programmed to continuously calculate and update a deployment threshold based on the most recently determined position of the occupant relative to the airbag and consider the most recently calculated deployment threshold value in determining whether to issue a deployment signal. (col. 16, lines 34-36)

CLAIM 47 OF THE '100 PATENT	DISPUTED TERMS	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
	whether to issue the deployment signal.		

11. U.S. PATENT NO. 6,942,248

CLAIMS 1-3 and 8 OF THE '248 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. In a motor vehicle having an interior passenger compartment including a seat on which a child seat may be placed, [1]**a control system for controlling an occupant restraint device effective for protection of an occupant of the seat**, comprising:	[1]**a control system for controlling an occupant restraint device effective for protection of an occupant of the seat**,		[1] An assemblage of inter-related elements that control an occupant restraint device that is effective for protection of an occupant of a seat on which a child seat may be placed.
[2]**receiving means arranged in the vehicle for obtaining information about contents of the seat and generating a signal based on any contents of the seat**, said receiving means being **structured and arranged to generate a different signal for different contents of the seat when such contents are present on the seat**;	ATI: ***receiving means arranged … for obtaining information*** HONDA ET AL.: [2]**receiving means arranged in the vehicle for obtaining information about contents of the seat and generating a signal based on any contents of the seat**, **structured and arranged to generate a different signal for different contents of the seat when such contents are present**	Structure to obtain information. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is obtaining information about contents of the seat, and generating a signal based on any contents of the seat. Structure to perform the function includes that described in the patent specification and equivalents, such as wave transmitting means, wave receiving means, processor, transmitter, detector, receiver means including a wave receiving transducer such as an electromagnetic wave receiver or an ultrasonic transducer for receiving waves. Col. 8, lines 52-59; col. 9, lines 8-44; col. 14, line 58 – col. 15, line 36; col. 25, line 24 – col. 26, line	[2] Receiving means is a means plus function limitation that must be construed under 35 U.S.C. § 112, ¶ 6. The receiving means performs three functions. Function 1: obtaining information about the contents of the vehicle seat. Function 2: generating a signal based on the contents of the seat. Function 3: generate a different signal for different contents of the seat when such contents are present on the seat. Structure: (Function 1) The structure for obtaining information about the contents of the vehicle seat includes a wave transmitter for

	on the seat;	1; Figs. 1, 1A, 6, 7A, 7B, 8, 28, 29.	transmitting waves toward the seat; and a wave receiver arranged relative to the wave transmitter for receiving waves reflected from the seat; and a processor. The receiving means also include transmitters and receivers that transmit and receive radar signals, infrared waves, and laser signals. (col. 6, line 30 – col. 7, line 43; col. 9, lines 8-14; col. 16, lines 56-67; col. 42, lines 35-41; col. 45, lines 32-36) Other structure disclosed for this function is a transmitter for transmitting an energy signal at the excitation frequency of one or more resonators and a detector for sensing the return energy signal from the excited resonators. (col. 30, lines 2-6) Other structure disclosed for performing this function is "receiver means." Receiver means includes a wave receiving transducer that receives electromagnetic waves from a space above a seat portion of the seat. (col. 35, lines 37-41) (Function 2) The structure disclosed for generating a signal based upon the contents of the seat is a processor means coupled to a receiver means. The algorithm disclosed for the processor means an algorithm that finds the coordinates of the occupants head center and uses known relationships between the location of the mount and head center to estimate the mount and ear locations. The algorithm also includes an algorithm that analyzes a signal that is

			reflected from a monitored space, such as a passenger seat, in order to create a signal characteristic of the contents of the seat. The algorithm includes trained algorithms for determining the location of life forms in a vehicle. (col. 17, lines 65-67; col. 27, lines 29-35; col. 35, lines 42-45; col. 36, lines 2-3) (Function 3) The processor generates a different signal for different contents of the vehicle seat based on the received waves reflected from the vehicle seat. However, there is no structure disclosed in the specification concerning the algorithm by which the processor generates a different signal for different contents of the seat based on the received waves reflected from the vehicle seat. Accordingly, the "receiving means" limitation is fatally indefinite. Alternatively, if this limitation is to be provided a construction, the receiving means requires, at the very least, a processor employing a trained neural network.
[3]**analyzing means coupled to said receiving means for analyzing the signal in order to determine at least one of whether the contents of the seat include a child seat, whether the contents of**	ATI: ***analyzing means . . . for analyzing the signal*** HONDA ET AL.: [3]**analyzing means coupled to said receiving means for**	Structure to analyze the signal. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is analyzing the signal to determine at least one of whether the contents of the seat include a child seat, whether the contents of the seat include a child	[3] Analyzing means is coupled to the receiving means. The analyzing means is a means plus function limitation that must be construed under 35 U.S.C. § 112, ¶ 6. (col. 15, line 66 – col. 16, line 5) Function: Analyzing the signal generated by the receiving means to determine at least one of whether or not the contents of the

the seat include a child seat in a particular orientation and whether the contents of the seat include a child seat in a particular position; and	**analyzing the signal in order to determine at least one of whether the contents of the seat include a child seat, whether the contents of the seat include a child seat in a particular orientation and whether the contents of the seat include a child seat in a particular position**;	seat in a particular orientation, and whether the contents of the seat include a child seat in a particular position. Structure to perform the function includes that described in the patent specification and equivalents, such as a microprocessor, analysis unit. Col. 8, lines 59-65; col. 9. lines 1-7; col. 25, lines 36-61; fig. 7A, 7B.	vehicle seat include a child seat, whether or not the contents of the vehicle seat include a child seat in a particular orientation, or whether or not the contents of the vehicle seat include a child seat in a particular position. Structure: A microprocessor, that performs the algorithm illustrated in Figure 29. (Figure 29; col. 8, lines 59-65)
[4]**deployment means coupled to said analyzing means for controlling deployment of the occupant restraint device** based on the determination by said analyzing means.	ATI: ***deployment means . . . for controlling deployment*** HONDA ET AL.: [4]**deployment means coupled to said analyzing means for controlling deployment of the occupant restraint device**	Structure to control deployment. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is controlling deployment of the occupant restraint device. Structure to perform the function includes that described in the patent specification and equivalents, such as a deployment unit and control circuit. Col. 8, lines 65-67; col. 26, lines 17-23; fig. 9.	[4] Deployment means coupled to the analyzing means. The deployment means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Controlling deployment of the occupant restraint device based on the occupancy determination made by the analyzing means. Controlling deployment is controlling timing of deployment, rate of gas flow into or out of the airbag, or the rate of deployment. (col. 35, lines 54-58) Structure: There is no structure disclosed in the specification for the deployment means. Because there is inadequate disclosure of structure, this means plus function limitation is indefinite.
2. The system of claim 1, wherein said analyzing means are [5]**structured**	[5]**structured and arranged to determine whether**		[5] The analyzing means structured and arranged to determine whether the contents of the vehicle seat include a child seat that

and arranged to determine whether the contents of the seat include a child seat in a rear-facing position.	**the contents of the seat include a child seat in a rear-facing position**.		is positioned such that a child, if present in the seat and properly seated, faces the rear of the vehicle.
3. The system of claim 1, wherein said analyzing means are [6]**structured and arranged to determine the position of the child seat relative to the occupant restraint device**.	[6]**structured and arranged to determine the position of the child seat relative to the occupant restraint device**.		[6] To fix the point or area in space actually occupied by the child seat relative to the air bag. The position of the child seat is determined using processor employing a position determining algorithm generated by one or more trained neural networks. (col. 4, lines 43-46; col. 35, lines (Prior *Delphi* case No. 03-71368, Opinion and Order (E.D. Mich. Sep. 29, 2004))
8. The system of claim 1, wherein the occupant restraint device is a [7]**side airbag**.	[7]**side airbag**.		[7] An airbag for use in a lateral crash of a vehicle and located at a side of a vehicle. (col. 4, lines 19-24); (Prosecution history of the '248 patent, Paper #4, Amendment dated April 22, 2004, p. 10)

CLAIMS 11-13 OF THE '248 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
11. In a motor vehicle having an interior passenger compartment including a seat on which a child seat may be placed, [8]**a method for detecting the presence of a child seat on the seat**, comprising the steps of:	[8]**a method for detecting the presence of a child seat on the seat**,		[8] A method for detecting whether or not a child seat is present on a seat that is located in an interior passenger compartment of a motor vehicle. .
[9]**obtaining information about contents of the seat**;	[9]**obtaining information about contents of the seat**;		[9] This step is a step plus function claims and must be construed under 35 U.S.C. § 112, ¶ 6. The acts disclosed in the specification for this "obtaining" step consist of transmitting ultrasonic, laser signals, radar, electromagnetic, or infrared waves towards the contents of the vehicle seat and receiving ultrasonic, laser signals, radar, electromagnetic, or infrared waves reflected by the contents of the vehicle seat. The acts disclosed in the specification for this "obtaining" step also consist of transmitting an ultrasonic energy signal at an excitation frequency to excite one or more resonators and receiving the return energy signals from the excited resonators.

[10]**generating a signal based on the information about the contents of the seat**, a different signal being generated for different contents of the seat when such contents are present on the seat;	[10]**generating a signal based on the information about the contents of the seat**,		[10] Generating a signal based on the obtained information about the contents of the seat wherein a different signal is generated for different contents of the vehicle seat when such contents are present on the vehicle seat.
[11]**analyzing the signal** in order to determine at least one of whether the contents of the seat include a child seat, whether the contents of the seat include a [12]**child seat in a particular orientation** and whether the contents of the seat include a [13]**child seat in a particular position**; and	[11]**analyzing the signal** [12]**child seat in a particular orientation** [13]**child seat in a particular position**;		[11] Analyzing the generated signal to determine at least one of whether the contents of the vehicle seat include a child seat, whether the contents of the vehicle seat include a child seat in a particular orientation and whether the contents of the vehicle seat include a child seat in a particular position. [12] A "child seat in a particular orientation" is a specific, pre-defined orientation of the child seat relative to the occupant restraint device. (col. 9, lines 1-7) [13] The term "position" refers to whether the child seat is rear or forward facing. (col. 9, lines 1-7)
[14]**controlling deployment of the occupant restraint device** based on the analysis of the signal.	[14]**controlling deployment of the occupant restraint device**		[14] Controlling timing of deployment, rate of gas flow into or out of the airbag, or the rate of deployment based upon the analyzed signal. (col. 35, lines 54-58)
12. The method of claim 11, wherein the step of analyzing the signal comprises [15]**the step**	[15]**the step of analyzing the signal to determine whether the contents of the**		[15] Analyzing the signal to determine whether the contents of the vehicle seat include a child seat in a rear-facing position.

of analyzing the signal to determine whether the contents of the seat include a child seat in a rear-facing position.	**seat include a child seat in a rear-facing position**.		
13. The method of claim 11, further comprising [16]**the step of determining the position of the child seat, when present, relative to the occupant restraint device**, [17]**deployment of the occupant restraint device being controlled based on the determination of whether the contents of the seat include a child seat and the position of the child seat**.	[16]**the step of determining the position of the child seat, when present, relative to the occupant restraint device**, [17]**deployment of the occupant restraint device being controlled based on the determination of whether the contents of the seat include a child seat and the position of the child seat**.		[16] To fix the point or area in space actually occupied by the child seat relative to the air bag. The position of the child seat is determined using processor employing a position determining algorithm generated by one or more trained neural networks. (*Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004)); ('248 patent, col. 10, lines 49-52; col. 16, lines 6-24; col. 46, lines 7-10). A detected physical characteristic of an occupying item, such as height of the passenger, is not the position because the position is a characteristic of the occupying item's relation to its environment. (Prosecution history of U.S. Pat. No. 6,283,503 to Breed, Paper #7, Amendment dated Nov. 21, 2000, p. 9). [17] Deployment of the occupant restraint device being controlled based on the determination of whether the contents of the vehicle seat include a child seat and the position of the child seat.

12. U.S. PATENT NO. 6,958,451

CLAIM 1 OF THE '451 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. An arrangement for determining weight of [1] **an occupying item in a seat** in a vehicle and [2] **whether the occupying item is alive** [3] **while the seat is moving**, comprising:	[1] **an occupying item in a seat** [2] **whether the occupying item is alive** [3] **while the seat is moving**		The preamble of claim 1 is considered to be a structural element of claim 1. The limitation, "whether the occupying item is alive while the seat is moving" has been argued to overcome references. Prosecution history of the '451 patent, p. 9, ATI's Amendment dated Mar. 28, 2005 for the '451 patent. [1] The limitation, "an occupying item in a seat" means an object that applies a force onto the seat and that occupies a seated area, such as a human occupant or a bag of groceries. The '451 patent, col. 13, lines 39-44; U.S. Pat. No. 6,422,595, col. 6, lines 29-30. [2] The limitation, "whether the occupying item is alive" means whether the object is moving or stationary. Prosecution history of the '451 patent, *see* p. 12, ATI's Amendment dated May 5, 2004. [3] The limitation, "while the seat is moving" means while a vehicle is moving. The '451 patent, col. 14, lines 34-44
[4] **at least one** [5] **force sensor** [6] **arranged to obtain** [7] **a measurement of the force applied to the seat by the occupying item**;	[4] **at least one** [5] **force sensor** [6] **arranged to obtain**		[4] The phrase, "at least one" means only one or more than one. *Rhine v. Casio, Inc.*, 183 F.3d 1342 (Fed. Cir. 1999). [5] The limitation, "force sensor" means a transducer that is directly connected to the vehicle seat containing the occupying item and calculates the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration

	[7] **a measurement of the force applied to the seat by the occupying item**;		of gravity. The '451 patent, Col. 13, lines 44-52. [6] The limitation, "arranged to obtain" means mounted into, below the seat, or on the seat structure. The '451 patent, Col. 13, lines 35-37. [7] The limitation, "a measurement of the force applied to the seat by the occupying item" means to measure the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. The '451 patent, *see* col. 13, lines 36-44.
[8] **measuring means for measuring dynamic forces applied to the seat resulting from motion of the vehicle**; and	ATI: ***measuring means for measuring dynamic forces*** [8] **measuring means for measuring dynamic forces applied to the seat resulting from motion of the vehicle**	Structure that measures dynamic forces. This is a means-plus-function limitation subject to 35 U.S.C. § 112(6). The function is measuring dynamic forces applied to the seat resulting from motion of the vehicle. Structure to perform the function includes that described in the patent specification and equivalents, such as a forcing function determination	[8] The limitation, "measuring means" is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. The function for the means for measuring dynamic forces is to measure forces that are applied to the seat, that results from the motion of a vehicle and that affect the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. Prosecution history of the '451 patent, p. 11, ATI's Amendment dated May 18, 2004 for the '451 patent. The structure for the measuring means is an accelerometer. The '451 patent, col. 14, lines 4-9, 11-15 and 35-44, col. 42, lines 37-62 and col. 45, line 61-col. 46, line 14.

		arrangement, which may comprise at least one accelerometer such as a vertical accelerometer. Col. 8, line 65 – col. 9, 9; col. 9, lines 33-34; col. 9, lines 40-45.	
[9] **a processor** [10] **coupled to** said [11] **at least one** [12] **weight [sic. force] sensor** and said measuring means for [13] **receiving the measurement of the force applied to the seat from said at least one force sensor** and the [14] **dynamic forces** from said measuring means, said processor [15] **being arranged to determine the weight of the occupying item based thereon**,	[9] **a processor** [10] **coupled to** [11] **at least one** [12] **weight [sic. force] sensor** [13] **receiving the measurement of the force applied to the seat from said at least one force sensor** [14] **dynamic forces** [15] **being arranged to determine the weight of the occupying item based thereon**,		[9] The limitation, "a processor" is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. The function for the processor is to determine the weight. The structure for performing the function is a processor programmed with a pattern recognition algorithm. The '451 patent, col. 36, lines 55-58; col. 46, lines 10-23. [10] The limitation, "coupled to" means providing an input to. The '451 patent, col. 18, lines 15-17. [11] The limitation, "at least one" means either only one or more than one. *Rhine v. Casio, Inc.*, 183 F.3d 1342 (Fed. Cir. 1999). [12] The limitation, "weight sensor" means a typographical error of the term, "force sensor." For the "force sensor," see [5] above. [13] The limitation, "receiving the measurement of the force applied to the seat from said at least one force sensor" means receiving the measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. The '451 patent, col. 46, line 13

			[14] The limitation, "dynamic forces" means forces that are applied to the seat, that results from the motion of a vehicle and that affects the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat, such as vertical acceleration. Prosecution history of the '451 patent, *See* p. 11, ATI's Amendment dated May 5, 2004 and p. 11, ATI's Amendment dated May 18, 2004. [15] The limitation, "being arranged to determine the weight of the occupying item based thereon" means separating or eliminating dynamic forces such as vertical acceleration from the measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. The '451 patent, Col. 13, line 63- col. 14, line 12; col. 42, line 65- col. 43, line 12; col. 45, line 67-col. 46, line 9; and prosecution history of the '451 patent, p. 11, ATI's Amendment dated May 18, 2004.
said processor being arranged to [16] **differentiate between animate and inanimate objects** by [17] **analyzing the measurements from said at least one force sensor over time and the dynamic forces applied to the seat from said measuring means over time**.	[16] **differentiate between animate and inanimate objects** [17] **analyzing the measurements from said at least one force sensor over time and the dynamic forces applied to the seat**		[16] The limitation, "differentiate between animate and inanimate objects" means differentiating between moving object and stationary object. Differentiating between adult/child and a child seat does not "differentiate between animate and inanimate objects**."** The '451 patent, col. 14, lines 12-16; Prosecution history of the '451 patent, *see* p. 12, ATI's Amendment dated May 5, 2004 for the '451 patent. [17] The limitation, "analyzing the measurements from said at least force sensor over time and the dynamic forces applied to the seat from said measuring means over time" means comparing the pattern of the

	from said measuring means over time.		measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat, to the pattern of dynamic force. The '451 patent, col. 46, lines 12-14.

CLAIM 8 OF THE '451 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
8. A method for classifying an occupying item in a seat, comprising the steps of:			
[18] **measuring the force applied to the seat by the occupying item at time intervals**; and	[18] **measuring the force applied to the seat by the occupying item at time intervals**		[18] This limitation means measuring the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat over a period of time. e.g., the '451 patent, col. 13, lines 35-52, col. 13. line 63- col. 14, line 16, col. 15, lines 1-10, col. 43, lines 1-9.
[19] **identifying the existence of patterns in the measurements of the force applied to the seat over time** and	[19] **identifying the existence of patterns in the measurements of the force applied to the seat over time**		[19] This limitation means discerning changes in the distribution of the measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat due to motion of the occupying item over a period of time. The '451 patent,col. 14, lines 12-16; *See* also p. 10, ATI's Amendment dated Nov. 1, 2004 for the '451 patent.

[20] **analyzing any identified pattern to determine if it approximates a known pattern indicative of an animate object or an inanimate object**,	[20] **analyzing any identified pattern to determine if it approximates a known pattern indicative of an animate object or an inanimate object**,		[20] The phrase, "determine if it approximates a known pattern indicative of an animate object or an inanimate object" means distinguishing between moving and stationary objects in the seat. The '451 patent, col. 14, lines 12-16; col. 42, lines 57-62; Prosecution history of the '451 patent, *see* p. 12, ATI's Amendment dated May 5, 2004.
the step of identifying the existence of patterns comprising the step of utilizing [21] **a pattern recognition algorithm** to identify patterns in the measurements of the force applied to the seat over time.	[21] **a pattern recognition algorithm**		[21] A pattern recognition algorithm means a trained neural network that identifies the object based on the determined distribution of the measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. The pattern recognition algorithm is an algorithm that is taught how to recognize occupancy states by subjecting the algorithm to examples and that automatically generates the best neural network upon input of the data based on the training. The '451 patent, col. 36, lines 55-58; U.S. Pat. No. 6,397,136 ("the '136 patent), col. 6, lines 20-23; col. 13, lines 3-7; Prosecution history of the '136 patent, Paper # 15, Declaration of David Breed dated July 10, 2001.

CLAIMS 13 and 26 OF THE '451 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
13. An arrangement for determining			The preamble of claim 13 is considered to be a

weight and position of an occupying item in a seat while the seat is moving, comprising:			structural element of claim 13. The limitation, "determining weight and position of an occupying item in a seat while the seat is moving" relates to patentability. Prosecution history of the '451 patent, p. 12, ATI's Amendment dated Mar. 18, 2004; Prosecution history of the '451 patent, p. 12, ATI's Amendment dated Jun. 1, 2004.
at least one force sensor arranged to obtain a measurement of the force applied to the seat by the occupying item;			
[22] **a determination arrangement** [23] **arranged to determine a function representative of forces which affect the weight of the occupying item**; and	[22] **a determination arrangement** [23] **arranged to determine a function representative of forces which affect the weight of the occupying item**; and		[22] The limitation, "a determination arrangement" a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. The function for the determination arrangement is to determine a function representative of forces which affect the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. The structure for the determination arrangement is an accelerometer for measuring accelerations resulting from road roughness, steering maneuvers, and a vehicle suspension system. Prosecution history of the '451 patent, *see* p. 3, ATI's Amendment dated Mar. 14, 2004 for the '451 patent; The '451 patent, col. 14, lines 4-9, 11-15 and 35-44, col. 42, lines 37-62 and col. 45, line 61-col. 46, line 14 [23] This limitation means measuring accelerations resulting from road roughness, steering maneuvers, and a vehicle suspension system. The '451 patent,

			col. 42, lines 45-56
a processor coupled to said at least one force sensor and said determination arrangement for receiving the measurement of the force applied to the seat from said at least one force sensor and the function from said determination arrangement and determining the weight of the occupying item based thereon,			
said processor being arranged to determine [24] **the position of the occupying item on the seat** by analyzing the measurements from said at least one force sensor over time and the function from said determination arrangement over time.	[24] **the position of the occupying item on the seat**		[24] This limitation, "the position of the occupying item on the seat" means the point or area in space actually occupying by the head and/or chest of the occupant relative to the air bag module and where in the seat the occupying item is sitting based on a distribution of the measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. A measured physical characteristic of the occupying item such as the height of a passenger is not the position of the occupying item on the seat. The position of the occupying item is a characteristic of the occupying item's relation to its environment. The '451 patent, col. 15, line 35-41; col. 36, lines 52-54; p. 9, ATI's Amendment filed on Nov. 21, 2000 for 09/448,337; Prosecution history of 09/448,337, p. 9, ATI's Amendment dated on 11/21/2000; *Automotive Technologies International, Inc. v. Delphi Corp.* No. 03-71368, slip op. at 21-23 (E.D. Mich. Sep. 29, 2004).

26. The arrangement of claim 13,			
wherein said at least one force sensor comprises [25] **a strain gage sensor**.	[25] **a strain gage sensor**.		[25] The limitation, "a strain gage sensor" means a transducer that measures deformation or strain of the structure on which the transducer sensor is mounted. The '451 patent, col. 35, lines 3-4. p. 12, Prosecution history of U.S. Pat. No. 6,242,701, pp. 11-14, ATI's Amendment dated Aug. 15, 2000.

CLAIM 32 OF THE '451 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
32. An arrangement for determining weight and position of an occupying item in a seat in a vehicle while the seat is moving, comprising:			
at least one force sensor arranged to obtain a measurement of the force applied to the seat by the occupying item;			
[26] **measuring means for measuring dynamic forces applied to the seat resulting from motion of the vehicle**; and	[26] **measuring means for measuring dynamic forces applied to the seat resulting from motion of the vehicle**		[26] The limitation, "measuring means" is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. The function for the means for measuring dynamic forces is to measure forces that are applied to the seat, that results from the motion of a vehicle and that affect the force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat. Prosecution history

			of the '451 patent, *See* p. 11, ATI's Amendment dated May 18, 2004. The structure for measuring means is an accelerometer. The '451 patent, col. 14, lines 4-9, 11-15 and 35-44, col. 42, lines 37-62 and col. 45, line 61- col. 46, line 14.
a processor coupled to said at least one force sensor and said measuring means for receiving the measurement of the force applied to the seat from said at least one force sensor and the dynamic forces from said measuring means,			
said processor being arranged to determine [27] **the weight of the occupying item** based thereon,	[27] **the weight of the occupying item**		[27] The limitation, "the weight of the occupying item" means the measured force that gravitation exerts on the occupying item, equal to the mass of the occupying item times the local acceleration of gravity applied onto the seat from which the dynamic forces are eliminated or separated. The '451 patent, col. 13, line 63- col. 14, line 12; col. 42, line 65- col. 43, line 12; col. 45, line 67-col. 46, line 9; and Prosecution history of the '451 patent, p. 11, ATI's Amendment dated May 18, 2004.
said processor being arranged to determine the position of the occupying item on the seat by analyzing the measurements from said at least one force sensor over time and the dynamic forces applied to the seat from said measuring means over time.			

13. U.S. PATENT NO. 6,950,022

CLAIM 1 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
1. An [1]**arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle**, comprising:	[1]**arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle**		[1] An assemblage of inter-related elements designed to obtain and communicate information about occupancy of a passenger compartment of a vehicle.
[2]**at least one** [3]**sensor for obtaining** [4]**data** on occupying items in the passenger compartment;	[2]**at least one** [3]**sensor for obtaining** [4]**data**		[2] The phrase "at least one" means one or more. [3] The phrase "sensor for obtaining" means a transducer that receives data characteristic of and affected by an occupant. [4] "Data" means the raw data received by the sensor.
[5]**generating means coupled to said at least one sensor for generating** [6]**information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor**;	[5]**generating means coupled to said at least one sensor for generating**		[5] Generating means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Generating information about the occupancy of the passenger compartment based on data obtained by the sensor.

	[6]**information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor**;		Structure: The structure for generating includes a processor, implementing one or more pattern recognition algorithms generated by a trained neural network to determine occupancy information. (col. 10, lines 9-15; col. 15, lines 12-16) [6] "Information about the occupancy of the passenger compartment" means the number and type of occupants, whether any occupants have stopped breathing or are breathing erratically, whether the occupants are conscious, whether blood is present, and whether the occupants are making noise. (col. 11, lines 42-45; col. 17, lines 9-10; col. 20, lines 20-26)
[7]**communications means coupled to said generating means and arranged to establish a communications channel between the vehicle and a remote facility** to thereby enable the information about the occupancy of the passenger compartment generated by said generating means to be [8]**transmitted** [9]**to the remote facility**; and	[7]**communications means coupled to said generating means and arranged to establish a communications channel between the vehicle and a remote facility** [8]**transmitted** [9]**to the remote facility**		[7] Communications means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Establishing a communications channel between the vehicle and a remote facility. Structure: A cellular phone system connected to the generating means. (Abstract; col. 16, line 62 – col. 17, line 15) [8] The term "transmitted" means sent wirelessly. (Abstract; col. 19, line 59; col. 10, lines 54-56)

			[9] The phrase "to the remote facility" means a local separate from the local of the vehicle that is staffed by emergency response personnel. (col. 10, lines 54-56)
at least one [10]**memory unit** [11]**coupled to** said generating means [12]**for storing** the information about the occupancy of the passenger compartment,	[10]**memory unit** [11]**coupled to** [12]**for storing**		[10] The term "memory unit" means a device for electronically retaining data. (col. 8, lines 60-62) [11] The term "coupled to" means connected to. [12] The term "for storing" means electronically retaining. (col. 9, line 66 – col. 10, line 3)
said communications means being coupled to said at least one memory unit and [13]**interrogating** said at least one memory unit [14]**upon a crash of the vehicle** [15]**to thereby obtain the information about the occupancy of the passenger compartment**.	[13]**interrogating** [14]**upon a crash of the vehicle** [15]**to thereby obtain the information about the occupancy of the passenger compartment**.		[13] The term "interrogating" means querying. (col. 8, lines 64-67) [14] The phrase "upon a crash of the vehicle" means during or after the occurrence of a vehicle crash. (col. 9, lines 7-18) [15] The phrase "to thereby obtain the information about the occupancy of the passenger compartment" means the communications means queries the memory unit to retrieve information about the occupancy of the passenger compartment. (col. 9, lines 7-18)

CLAIM 8 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
8. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising:			
at least one sensor for obtaining data on occupying items in the passenger compartment;			
generating means coupled to said at least one sensor for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor;			
communications means coupled to said generating means and arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment generated by said generating means to be transmitted to the remote facility; and			
[16]**means for determining the health state of any occupants**, said communications means being coupled to said health state	[16]**means for determining the health state of any occupants**,		[16]The means for determining is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Determining the health state of

determining means and [17]**interrogating said health state determining means** upon a crash of the vehicle to thereby [18]**obtain and transmit the health state of the occupants**.	[17]**interrogating said health state determining means** [18]**obtain and transmit the health state of the occupants**.		any occupants Structure: The structure for determining the health state of any occupants includes a breath-analyzer, a heartbeat sensor, a micropower impulse radar, a weight distribution system, a motion sensor, a chemical sensor, a microphone, an occupant detection sensor, and an occupant position sensor. (col. 17, line 50 – col. 18, line 67; col. 19, line 67 – col. 20, line 2) The "health state of any occupants" means whether an occupant's breathing is erratic, whether the driver is dozing off, whether the alcohol content of the driver's breath, the movement of the occupants, whether blood is present in the vehicle, the heartbeat of the occupants. (col. 9, lines 10-18; col. 17, lines 50-55; col. 19, line 64 – col. 20, line 2) [17] "Interrogating said health state determining means upon a crash of the vehicle" means querying the health state determining means. (col. 8, lines 64-67) [18] "Obtain and transmit the health state of the occupants" means receiving the health state based on the interrogation and electronically sending the health state and transmit the received health state to a remote facility. (col. 20,

			lines 3-4).

CLAIM 16 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
16. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising:			
at least one sensor for obtaining data on occupying items in the passenger compartment,			
said at least one sensor generating a [19]**signal representative of the data obtained thereby**;	[19]**signal representative of the data obtained thereby**;		[19] The term "representative" is vague and ambiguous.
generating means coupled to said at least one sensor for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor,			
[20]**said generating means comprising a processor for receiving and analyzing the signal from said at least one sensor in order to generate the information about the occupancy** of the passenger compartment; and	[20]**said generating means comprising a processor for receiving and analyzing the signal from said at least one sensor in order to generate the information about the occupancy**		[20] The phrase "said generating means comprising a processor for receiving and analyzing . . . in order to generate information about the occupancy" means the generating means includes a processor programmed to implement one or more trained pattern recognition algorithms generated by a trained neural network to generate information about the occupancy of the passenger compartment based on the signal generated by the sensor. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36)

communications means coupled to said generating means and arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment generated by said generating means to be transmitted to the remote facility,			
said processor comprising [21]**pattern recognition means adapted to classify an occupant of the seat** and [22]**the information about the occupancy of the passenger compartment includes the classification of the occupant obtained by said pattern recognition means**.	[21]**pattern recognition means adapted to classify an occupant of the seat** [22]**the information about the occupancy of the passenger compartment includes the classification of the occupant obtained by said pattern recognition means**.		[21] Pattern recognition means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Classifying an occupant of the seat. Structure: A processor implementing one or more pattern recognition algorithms generating by a trained neural network. (col. 16, lines 5-15, 18-36) [22] Information about the occupancy includes the classification made by the pattern recognition means. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36)

CLAIM 18 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
18. A [23]**method for obtaining and conveying information about occupancy of a passenger compartment of a vehicle**, comprising the steps of:	[23]**method for obtaining and conveying information about occupancy of a passenger compartment of a vehicle**,		[23] A method for obtaining and communicating information about the occupancy of a vehicle.
obtaining data about occupying items in the passenger compartment,			
[24]**generating information about the occupancy of the passenger compartment** based on the obtained data,	[24]**generating information about the occupancy of the passenger compartment**		[24] "generating information about the occupancy of the passenger compartment" means applying the obtained data to one or more trained pattern recognition algorithms to produce information about the occupancy of the passenger compartment. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, col. 17, lines 33-46)
[25]**establishing a communications channel between the vehicle and a remote facility** to enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility,	[25]**establishing a communications channel between the vehicle and a remote facility**		[25] "Establishing a communications channel between the vehicle" means activating a cellular phone system that is connected to the processor containing the trained pattern recognition algorithm referenced above and directing the cellular phone system to dial a remote facility. (col. 16, line 62 – col. 17, line 15)
[26]**storing the information about the occupancy of the passenger compartment in at least one memory unit**,	[26]**storing the information about the occupancy of the passenger**		[26] "Storing information about the occupancy of the passenger compartment in at least one memory unit" means electronically retaining the information

and	**compartment in at least one memory unit**,		about the occupancy of the passenger compartment. (col. 8, lines 60-62; col. 9, line 66 – col. 10, line 3)
interrogating the at least one memory unit upon a crash of the vehicle to thereby obtain the information about the occupancy of the passenger compartment.			

CLAIM 23 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
23. A method for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising the steps of:			
obtaining data about occupying items in the passenger compartment,			
generating information about the occupancy of the passenger compartment based on the obtained data,			
establishing a communications channel between the vehicle and a remote facility to enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility,			
[27]**generating a signal representative of the obtained data**, and	[27]**generating a signal representative of the obtained data**,		[27] The term "representative" is vague and ambiguous.
providing a processor for receiving the signal representative of the data and			
[28]**analyzing the signal representative of the data**	[28]**analyzing the signal representative of the**		[28] There is no antecedent basis for "the information about the state of health of at

in order to generate the information about the state of health of at least one occupant of the passenger compartment.	**data in order to generate the information about the state of health of at least one occupant of the passenger compartment**.		least one occupant of the passenger compartment." In addition, the term "representative" is vague and ambiguous. Thus, this limitation is incapable of construction.

CLAIM 24 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
24. A method for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising the steps of:			
obtaining data about occupying items in the passenger compartment,			
generating a signal representative of the obtained data,			
[29]**generating information about the occupancy of the passenger compartment based on the obtained data by providing a processor for receiving the signal representative of the data** and	[29] **generating information about the occupancy of the passenger compartment based on the obtained data by providing a processor for receiving the signal representative of the data**		[29] The term "representative" is vague and ambiguous. Alternatively, if this term is to be construed, "generating information about the occupancy of the passenger compartment . . . by providing a processor for receiving the signal and analyzing the signal" means applying one or more trained pattern recognition algorithms implemented on a processor to the signal to produce information about the occupancy of the passenger compartment. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, col. 17, lines 33-46)
[30]**analyzing the signal representative of the data** in	[30]**analyzing the signal representative of the**		[30] The term "representative" is vague and ambiguous.

order to generate the information about the occupancy of the passenger compartment,	**data**		Alternatively, if this term is to be construed, applying the signal to a train pattern recognition algorithm. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, col. 17, lines 33-46)
the step of analyzing the signal representative of the data comprising the step of [31]**applying a pattern recognition technique to recognize and identify any occupants of the passenger compartment**,	[31]**applying a pattern recognition technique to recognize and identify any occupants of the passenger compartment**,		[31] "Applying a pattern recognition technique" means applying the signal to one or more trained pattern recognition algorithms to recognize a pattern in the signal and identify any occupants based on the recognized pattern. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, 52-65; col. 17, lines 33-46)
incorporating the identification of the occupants of the passenger compartment into the information about the occupancy of the passenger compartment, and			
establishing a communications channel between the vehicle and a remote facility to enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility.			

CLAIM 26 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
26. A method for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising the steps of:			
obtaining data about occupying items in the passenger compartment,			
generating information about the occupancy of the passenger compartment based on the obtained data,			
establishing a communications channel between the vehicle and a remote facility to enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility,			
[32]**determining whether any occupants in the passenger compartment are moving** [33]**after a crash**, and	[32]**determining whether any occupants in the passenger compartment are moving** [33]**after a crash**,		[32] "Determining whether any occupants in the passenger compartment are moving after a crash" means inputting the obtained data into a trained pattern recognition algorithm that detects occupant movement within a vehicle based on the obtained data. (col. 17, lines 33-37; col. 31, lines 25-28)

			[33] subsequent to a crash occurring. (col. 17, lines 36-37)
incorporating an indication of [34]**the number of moving and non-moving occupants in the passenger compartment in the information about occupancy of the passenger compartment**.	[34]**the number of moving and non-moving occupants in the passenger compartment in the information about occupancy of the passenger compartment**.		[34] There is no antecedent basis for "the number of moving and non-moving occupants." Thus, this limitation is incapable of construction.

CLAIM 28 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
28. A method for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising the steps of:			
obtaining data about occupying items in the passenger compartment,			
generating information about the occupancy of the passenger compartment based on the obtained data,			
establishing a communications channel between the vehicle and a remote facility to enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility,			
the step of obtaining data comprising the step of [35]**arranging at least one wave-receiving sensor to receive waves** [36]**from a plurality of seat locations in the passenger compartment**.	[35]**arranging at least one wave-receiving sensor to receive waves**		[35] "Arranging at least one wave-receiving sensor to receive waves" means mounting a transducer in the vehicle that receives waves transmitted from a transmitter. (col. 8, lines 54-57; col. 14, line 53 – col. 15, line 5) The term, "waves" means propagating signals that have a direction of propagation, velocity of propagation, and a wavelength which depend on the property of the materials in which the waves exists and the type of waves

	[36]**from a plurality of seat locations in the passenger compartment**.		(e.g., acoustic, mechanical, electromagnetic). (Prosecution History of U.S. Pat. No. 6,513,830 to Breed, Paper #9, Amendment dated March 8, 2002, p. 3; Paper #11, Office Action dated June 12, 2002, pp. 2-5; Paper #15, Notice of Allowability dated Nov. 4, 2002, p. 2); (Prosecution history of U.S. Pat. No. 6,186,537 to Breed, Paper #19, Notice of Allowability/Denial of Interference dated June 7, 2000, pp. 2-3) [36] The wave is received after propagating through more than one seat locations in the passenger compartment of the vehicle.

CLAIM 29 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
29. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising	29. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising		
at least one sensor for obtaining data [37]**from the passenger compartment**,	at least one sensor for obtaining data [37]**from the passenger compartment**,		[37] "data from the passenger compartment" means data characteristic of the passenger compartment, including information about the occupancy of the passenger compartment. (col. 1, lines 48-49).
[38]**a processor** coupled to said at least one sensor for [39]**generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor**,	[38]**a processor** [39]**generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor**,		[38] The term "processor" means logic circuitry implementing one or more trained pattern recognition algorithms to generate information about the occupancy of the passenger compartment. (col. 16, lines 18-36) [39] The phrase "for generating information about the occupancy of the passenger compartment" means the processor is programmed to apply one or more pattern recognition algorithms to the obtained data to produce information about the occupancy of the passenger compartment. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, 52-65; col. 17, lines 33-46)
a [40]**communications unit**	[40]**communications unit**		[40] The term "communications

[41]**coupled to said processor** [42]**arranged to establish a communications channel between the vehicle and a remote facility** to thereby enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility, and	[41]**coupled to said processor** [42]**arranged to establish a communications channel between the vehicle and a remote facility**		unit" means a device that facilitates communication between the vehicle and a remote facility, such as cellular phone system. (Abstract; col. 16, line 62 – col. 17, line 15) [41] The phrase "coupled to said processor" means directly connected to the processor (Fig. 2A; col. 19, lines 20-21). [42] The phrase "arranged to establish a communications channel between the vehicle and a remote facility" means configured to activate a cellular phone system and direct the cellular phone system to dial a remote facility. (col. 16, line 62 – col. 17, line 15)
at least one memory unit [43]**coupled to or incorporated with** said processor for storing the information about the occupancy of the passenger compartment,	[43]**coupled to or incorporated with**		[43] "coupled to or incorporated with" means the memory unit is connected to the processor or the memory unit and processor are integral parts of one system.
said communications unit being coupled to said at least one memory unit and interrogating said at least one memory unit upon a crash of the vehicle to thereby obtain the information about the occupancy of the passenger compartment.			

CLAIM 35 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
35. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising			
at least one sensor for obtaining data from the passenger compartment,			
a processor coupled to said at least one sensor for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor, and			
a communications unit coupled to said processor arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility,			
said at least one sensor being [44]**a sensor adapted to receive waves providing information about the health state of the at least one occupant** such that said	[44]**a sensor adapted to receive waves providing information about the health state of the at least one occupant**		[44] The phrase "a sensor adapted to receive waves . . . " means a wave receiving sensor that receives waves and generates a signal based on the received waves that may be used to determine whether the occupant is

communications unit upon a crash of the vehicle transmits information about the state of health of the at least one occupant.			moving or breathing. (col. 9, lines1-5, 31-45).

CLAIM 36 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
36. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising			
at least one sensor for obtaining data from the passenger compartment, said at least one sensor generating a signal representative of the data obtained thereby,			
a processor coupled to said at least one sensor for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor,			
said processor [45]**receiving and analyzing the signal** from said at least one sensor [46]**in order to generate the information about the occupancy of the passenger compartment**, and	[45]**receiving and analyzing the signal** [46]**in order to generate the information about the occupancy of the passenger compartment**, and		[45] The phrase "receiving and analyzing the signal . . . in order to generate the information about the contents of the seat" means applying one or more trained pattern recognition algorithms implemented on a processor to the signal received from the sensor to generate information about the occupancy of the passenger compartment. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, 52-65; col. 17, lines 33-46) [46] The phrase "in order to generate the information about the occupancy

			of the passenger compartment" means the signal from the sensor is input into a trained pattern recognition algorithm for generating information about the occupancy of the passenger compartment. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, 52-65; col. 17, lines 33-46)
a communications unit coupled to said processor arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility,			
said processor comprising pattern recognition means adapted to classify any occupants of the seat and the information about the occupancy of the passenger compartment includes the classification of the occupants obtained by said pattern recognition means.			

CLAIM 38 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
38. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising:			
at least one sensor for obtaining data on occupying items in the passenger compartment;			
generating means coupled to said at least one sensor for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor; and			
communications means coupled to said generating means and arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment generated by said generating means to be transmitted to the remote facility,			
said at least one sensor being [47]**a micropower impulse radar sensor** [48]**adapted to detect motion of an occupant** whereby the	[47]**a micropower impulse radar sensor**		[47] The term "micropower impulse radar sensor" means a wave-receiving sensor which monitors motion in a particular range from the sensor. (col. 9, lines 1-5; col. 18, lines 1-2)

[49]**motion of the occupant** or [50]**absence of motion** of the occupant is [51]**indicative of whether the occupant is breathing**,	[48]**adapted to detect motion of an occupant** [49]**motion of the occupant** [50]**absence of motion** [51]**indicative of whether the occupant is breathing**,		[48] "adapted to detect motion of an occupant" means connecting the sensor to an arrangement that determines the location of the occupant's chest, adjusting the operational field of the micropower impulse radar based on the location of the occupant's chest, and monitoring movement of the occupant's chest area. (col. 18, lines 1-31) [49] The term "motion of the occupant" means movements of the occupant. [50] The term "absence of motion" means no movement. [51] The phrase "indicative of whether the occupant is breathing" means whether the occupant's chest is moving in a manner characteristic of breathing patterns. (col. 18, lines 1-3).
the information about the occupancy of the passenger compartment generated by said generating means being an [52]**indication of whether the occupant is breathing**.	[52]**indication of whether the occupant is breathing**.		[52] The phrase "indicative of whether the occupant is breathing" means whether the occupant's chest is moving in a manner characteristic of breathing patterns. (col. 18, lines 1-3).

CLAIM 39 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
39. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising:			
at least one sensor for obtaining data on occupying items in the passenger compartment, said at least one sensor is a wave-receiving sensor arranged to generate a signal representative of waves received thereby;			
generating means coupled to said at least one sensor for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor,			
said generating means being structured and arranged to receive the signal representative of the waves received by said wave-receiving sensor [53]**over time** and	[53]**over time**		[53] The term "over time" means continuously or periodically throughout a defined period of time. (col. 17, line 35).
[54]**determine whether any occupants in the passenger compartment are moving** such that the information about the occupancy of the passenger compartment generated by said generating means includes the	[54]**determine whether any occupants in the passenger compartment are moving**		[54] Generating means is a means plus function element and should be construed under 35 U.S.C. § 112, ¶ 6. Function: Determining whether any occupants in the passenger

number of moving and non-moving occupants in the passenger compartment; and			compartment are moving. Structure: The structure for generating includes a wave-receiving sensors coupled to a processor, the processor implementing one or more pattern recognition algorithms generated by a trained neural network to determine whether any occupants in the passenger compartment are moving. (col. 10, lines 9-15; col. 31, lines 25-28) The wave-receiving sensor may be a microwave impulse radar sensor, (col. 9, lines 1-5, 29-36; col. 18, lines 1-3)
communications means coupled to said generating means and arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment generated by said generating means to be transmitted to the remote facility.			

CLAIM 40 OF THE '022 PATENT	DISPUTED TERM	ATI PROPOSED CONSTRUCTION & SUPPORT	HONDA ET AL. PROPOSED CONSTRUCTION & SUPPORT
40. An arrangement for obtaining and conveying information about occupancy of a passenger compartment of a vehicle, comprising			
at least one sensor for obtaining data from the passenger compartment, said at least one sensor being a wave-receiving sensor arranged to generate a signal representative of the waves received thereby;			
a processor coupled to said at least one sensor [55]**for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor**,	[55]**for generating information about the occupancy of the passenger compartment based on the data obtained by said at least one sensor**,		[55] The phrase "for generating information about the occupancy of the passenger compartment" means the processor employs one or more trained pattern recognition algorithms to the obtained data to produce information about the occupancy of the passenger compartment. (col. 10, lines 9-15; col. 16, lines 5-15, 18-36, col. 17, lines 33-46)
said processor being structured and arranged to receive the signal			

representative of the waves received by said at least one wave-receiving sensor over time and determine whether any parts of any occupants in the passenger compartment are moving such that the information about the occupancy of the passenger compartment generated by said processor includes the number of moving and non-moving occupants in the passenger compartment; and			
a communications unit coupled to said processor arranged to establish a communications channel between the vehicle and a remote facility to thereby enable the information about the occupancy of the passenger compartment to be transmitted to the remote facility.			